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MONTHLY WEATHER REVIEW

APRIL 1946

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Contour lines and isotherms based on radiosonde observations at 0300 G.C.T. and winds based on pilot balloon observations at 1000 G.C.T.

CORRECTION

MONTHLY WEATHER REVIEW, March 1946, Vol. 74, lithograph 30, Chart VII: Legend reading "Depth of Snow on the Ground at 7: 30 p.m., Monday, March 29, 1946" should read "Monday, March 25, 1946."

MONTHLY WEATHER REVIEW

Acting Editor, Robert N. Culnan

VOL. 74, No. 4
W. B. No. 1469

APRIL 1946

CLOSED JUNE 5, 1946
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METEOROLOGICAL AND CLIMATOLOGICAL DATA FOR APRIL 1946

AEROLOGICAL OBSERVATIONS

[For description of change in Table 1 and charts, see REVIEW, January 1946, p. 6]

TABLE 1.—*Mean dynamic height (geopotential) in units of 0.98 dynamic meter, temperature in degrees centigrade, and relative humidity in percent, for standard pressures, as obtained by radiosondes during April 1946*

STATIONS AND MEAN SURFACE PRESSURES

Standard pressure surface (mb.)	Albany, N. Y. (1,003.2 mb.)				Albuquerque, N. Mex. (837.7 mb.)				Apalachicola, Fla. (1,017.9 mb.)				Atlanta, Ga. (983.4 mb.)				Big Spring, Tex. (926.6 mb.)				Bismarck, N. Dak. (954.7 mb.)				Boise, Idaho (915.4 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	30	93	5.6	66	30	1,620	16.9	32	30	5	19.5	83	30	300	16.3	72	30	774	20.5	41	30	505	9.8	58	30	868	12.4	52
1,000	30	118	(*)	----	30	72	(*)	----	30	158	19.6	75	30	156	(*)	----	30	106	(*)	----	30	114	(*)	----	30	115	(*)	----
950	30	536	3.6	65	30	527	(*)	----	30	599	17.8	61	30	598	16.9	61	30	553	(*)	----	30	544	(*)	----	30	558	(*)	----
900	30	974	0.8	68	30	1,000	(*)	----	30	1,059	15.0	58	30	1,054	14.0	60	30	1,025	20.5	39	30	996	9.4	44	30	1,010	13.6	45
850	30	1,430	−2.1	70	30	1,493	(*)	----	30	1,541	12.5	54	30	1,534	11.3	55	30	1,516	17.6	40	30	1,467	6.7	46	30	1,489	10.2	44
800	30	1,910	−4.4	70	30	2,011	15.4	31	30	2,048	10.3	43	30	2,038	8.8	51	30	2,031	14.7	38	30	1,962	3.4	48	30	1,990	6.3	49
750	30	2,420	−6.6	66	30	2,552	10.9	33	30	2,586	8.1	34	30	2,575	6.1	44	30	2,575	10.8	39	30	2,487	−0.2	52	30	2,517	1.9	52
700	30	2,953	−8.8	62	30	3,124	6.2	38	30	3,148	5.3	----	30	3,131	2.8	41	30	3,144	6.6	35	30	3,031	−3.6	57	30	3,067	−2.3	56
650	28	3,526	−11.1	61	30	3,721	1.0	45	30	3,749	2.0	----	28	3,732	−0.9	40	30	3,747	2.3	33	30	3,619	−7.3	56	30	3,653	−6.7	60
600	28	4,133	−14.4	56	30	4,364	−4.3	54	30	4,390	−1.9	----	27	4,366	−4.8	38	30	4,389	−2.0	36	30	4,232	−11.1	54	30	4,271	−11.0	63
550	28	4,789	−18.2	55	30	5,036	−9.7	59	30	5,071	−6.3	----	27	5,046	−9.0	37	29	5,072	−6.9	38	29	4,901	−15.7	60	30	4,934	−15.7	61
500	28	5,492	−22.9	----	30	5,772	−15.2	57	30	5,813	−11.6	----	27	5,777	−13.4	----	29	5,813	−11.9	----	29	5,608	−20.9	64	30	5,646	−21.0	----
450	28	6,260	−27.9	----	30	6,561	−20.6	49	29	6,614	−17.0	----	27	6,579	−18.8	----	29	6,618	−17.4	----	29	6,389	−26.5	----	30	6,420	−26.6	----
400	28	7,093	−33.6	----	30	7,422	−26.9	----	29	7,489	−23.2	----	27	7,437	−25.1	----	29	7,484	−24.0	----	29	7,220	−32.8	----	30	7,256	−32.8	----
350	27	8,016	−40.3	----	30	8,371	−33.8	----	29	8,452	−30.4	----	27	8,392	−32.4	----	29	8,444	−31.1	----	29	8,147	−39.5	----	29	8,191	−39.4	----
300	27	9,051	−47.1	----	30	9,434	−41.9	----	29	9,529	−38.8	----	27	9,460	−40.5	----	29	9,519	−39.1	----	27	9,195	−47.0	----	29	9,229	−46.6	----
250	27	10,243	−52.1	----	30	10,644	−50.9	----	28	10,754	−48.6	----	27	10,677	−49.8	----	28	10,739	−48.2	----	26	10,387	−54.4	----	28	10,429	−53.8	----
200	26	11,674	−53.6	----	29	12,070	−58.7	----	27	12,189	−58.6	----	26	12,106	−58.4	----	25	12,188	−55.6	----	21	11,800	−57.5	----	24	11,825	−57.5	----
175	26	12,333	−53.4	----	26	12,904	−60.3	----	27	13,021	−61.5	----	25	12,934	−60.4	----	19	13,046	−58.5	----	17	12,623	−55.4	----	19	12,664	−56.0	----
150	20	13,525	−52.5	----	19	13,870	−58.8	----	26	13,973	−62.6	----	22	13,888	−61.0	----	15	14,007	−60.1	----	16	13,615	−55.0	----	15	13,631	−55.4	----
125	17	14,702	−54.1	----	9	14,985	−61.3	----	20	15,080	−65.5	----	15	15,007	−63.2	----	5	15,121	−63.4	----	12	14,784	−55.7	----	9	14,783	−56.2	----
100	15	16,126	−56.4	----	----	----	----	----	9	16,410	−69.1	----	9	16,306	−66.2	----	----	----	----	----	6	16,160	−54.9	----	----	----	----	----
80	6	17,540	−57.4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Standard pressure surface (mb.)	Brownsville, Tex. (1,014.4 mb.)				Buffalo, N. Y. (989.3 mb.)				Burrwood, La. (1,018.2 mb.)				Caribou, Maine (989.2 mb.)				Charleston, S. C. (1,016.5 mb.)				Ciudad Victoria, Mexico (974.1 mb.)				Clovis, N. Mex. (870.0 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	30	6	22.4	86	30	221	5.5	66	30	2	20.1	87	30	191	0.0	80	30	14	15.8	82	30	335	25.7	63	30	1,306	17.1	34
1,000	30	129	21.8	86	30	132	(*)	----	30	158	19.6	81	30	103	(*)	----	30	153	16.9	70	30	101	(*)	----	30	91	(*)	----
950	30	582	19.8	74	30	555	4.9	59	30	607	17.4	67	30	516	−0.3	71	30	594	16.1	58	30	556	24.6	61	30	549	(*)	----
900	30	1,041	18.3	59	30	991	2.2	62	30	1,060	15.0	58	30	946	−2.6	73	30	1,049	13.8	55	30	1,027	21.1	64	30	1,018	(*)	----
850	30	1,530	16.5	47	30	1,450	−0.2	62	30	1,543	13.3	44	30	1,397	−5.1	75	30	1,529	11.6	52	30	1,450	17.7	67	30	1,504	18.0	32
800	30	2,044	14.8	40	30	1,933	−2.8	65	30	2,052	11.4	38	30	1,872	−7.0	70	30	2,033	8.9	48	30	2,036	14.4	68	30	2,019	14.4	34
750	30	2,592	12.2	40	30	2,449	−5.1	60	30	2,594	9.3	----	30	2,380	−9.1	66	30	2,571	6.4	42	30	2,583	11.8	62	30	2,564	10.3	26
700	30	3,162	8.7	36	30	2,981	−7.6	53	30	3,159	6.4	----	30	2,905	−11.4	63	30	3,127	2.8	39	30	3,153	8.8	54	30	3,130	5.8	38
650	30	3,774	4.6	37	30	3,564	−10.2	51	30	3,766	2.6	----	30	3,477	−14.1	61	29	3,724	−0.8	42	29	3,763	4.8	53	30	3,732	1.1	41
600	30	4,418	−0.1	39	28	4,165	−14.3	45	30	4,406	−1.3	----	30	4,074	−17.4	58	29	4,361	−4.7	44	29	4,412	0.4	52	30	4,369	−3.8	41
550	30	5,107	−5.0	41	28	4,822	−18.5	----	30	5,091	−5.7	----	30	4,723	−21.1	----	28	5,036	−9.1	44	29	5,101	−4.3	54	30	5,047	−8.9	40
500	30	5,851	−10.1	42	28	5,525	−22.9	----	30	5,835	−10.8	----	30	5,419	−25.6	----	27	5,769	−13.9	----	28	5,850	−9.3	50	30	5,780	−14.1	----
450	30	6,662	−15.2	46	27	6,299	−27.9	----	30	6,641	−16.1	----	30	6,179	−30.8	----	26	6,565	−19.3	----	28	6,661	−14.4	42	30	6,576	−19.9	----
400	30	7,535	−21.4	----	26	7,134	−33.5	----	30	7,516	−22.4	----	30	7,001	−36.6	----	26	7,427	−25.5	----	28	7,537	−20.8	----	30	7,434	−26.3	----
350	30	8,504	−28.7	----	26	8,058	−40.1	----	30	8,481	−29.8	----	30	7,912	−43.4	----	26	8,380	−32.8	----	27	8,512	−28.1	----	30	8,384	−33.6	----
300	30	9,588	−37.0	----	23	9,099	−47.5	----	29	9,566	−38.1	----	30	8,933	−49.7	----	26	9,447	−40.7	----	26	9,600	−36.5	----	30	9,446	−42.0	----
250	28	10,822	−46.8	----	22	10,281	−52.2	----	29	10,795	−47.4	----	30	10,117	−52.4	----	25	10,660	−50.0	----	25	10,839	−46.5	----	30	10,653	−51.5	----
200	27	12,267	−57.1	----	19	11,711	−54.0	----	26	12,239	−56.8	----	28	11,565	−52.2	----	23	12,092	−58.7	----	23	12,286	−57.2	----	30	12,074	−58.4	----
175	26	13,104	−60.8	----	17	12,568	−53.2	----	22	13,083	−59.7	----	28	12,429	−51.6	----	21	12,925	−60.4	----	21	13,126	−61.3	----	28	12,906	−60.4	----
150	25	14,062	−62.9	----	14	13,561	−52.6	----	19	14,039	−60.5	----	28	13,427	−52.2	----	19	13,875	−61.6	----	18	14,079	−64.1	----	25	13,861	−61.2	----
125	19	15,181	−66.1	----	10	14,807	−52.4	----	12	15,172	−63.6	----	22	14,390	−52.9	----	16	14,982	−64.4	----	14	15,198	−67.9	----	11	14,990	−63.3	----
100	8	16,544	−72.5	----	----	----	----	----	----	----	----	----	13	16,036	−54.0	----	11	16,362	−67.7	----	5	16,490	−72.4	----	6	16,338	−64.6	----
80	----	----	----	----	----	----	----	----	----	----	----	----	5	17,468	−55.5	----	----	----	----	----	----	----	----	----	----	----	----	----

See footnotes at end of table.

TABLE 1.—*Mean dynamic height (geopotential) in units of 0.98 dynamic meter, temperature in degrees centigrade, and relative humidity in percent, for standard pressures, as obtained by radiosondes during April 1946*—Continued

Standard pressure surface (mb.)	Columbia, Mo. (988.8 mb.)				Dodge City, Kans. (924.5 mb.)				El Paso, Tex. (880.9 mb.)				Ely, Nev. (808.5 mb.)				Fort Worth, Tex. (991.0 mb.)				Glasgow, Mont. (937.9 mb.)				Grand Junction, Colo. (852.3 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	30	234	14.6	63	30	787	14.8	53	30	1,195	21.6	23	30	1,908	8.3	56	30	211	20.0	62	28	648	11.6	38	30	1,474	14.3	41
1,000	30	136	(*)	----	30	111	(*)	----	30	77	(*)	----	30	107	(*)	----	30	133	(*)	----	28	104	(*)	----	30	94	(*)	----
950	30	574	14.1	55	30	556	(*)	----	30	539	(*)	----	30	553	(*)	----	30	581	19.3	57	28	541	(*)	----	30	549	(*)	----
900	30	1,026	11.8	53	30	1,014	15.9	47	30	1,012	(*)	----	30	1,012	(*)	----	30	1,040	16.8	53	28	992	11.3	34	30	1,014	(*)	----
850	30	1,502	9.3	50	30	1,498	13.8	44	30	1,504	20.6	22	30	1,489	(*)	----	30	1,526	14.6	47	27	1,467	7.9	39	30	1,497	14.8	40
800	30	2,002	6.7	64	30	2,007	11.6	39	30	2,023	16.7	24	30	1,996	9.9	49	30	2,037	12.9	33	27	1,964	4.0	46	30	2,008	12.0	38
750	30	2,538	4.6	45	30	2,548	8.4	37	30	2,571	12.1	27	30	2,535	6.3	46	30	2,580	10.1	33	27	2,487	0.0	53	30	2,547	7.7	42
700	30	3,089	1.2	44	30	3,110	4.4	39	30	3,140	7.2	31	30	3,090	1.6	51	30	3,146	6.4	35	27	3,033	−4.0	56	30	3,107	+2.9	47
650	30	3,681	−2.3	47	30	3,710	0.2	42	30	3,742	2.2	36	30	3,684	−3.4	58	30	3,750	2.3	35	27	3,617	−8.5	62	30	3,702	−2.1	52
600	29	4,312	−6.1	48	30	4,345	−4.4	45	30	4,385	−3.0	42	30	4,310	−8.2	59	30	4,391	−2.0	34	25	4,229	−12.6	59	30	4,332	−6.8	54
550	29	4,987	−10.7	47	29	5,026	−9.3	44	30	5,066	−8.2	39	30	4,980	−13.1	54	29	5,075	−6.5	----	25	4,890	−16.6	58	30	5,003	−12.0	56
500	29	5,715	−15.4	42	29	5,756	−14.4	40	30	5,801	−13.1	35	30	5,698	−18.3	48	29	5,814	−11.5	----	23	5,603	−21.6	----	30	5,730	−17.2	55
450	29	6,507	−20.5	----	29	6,552	−20.1	----	30	6,599	−18.7	41	30	6,484	−23.8	----	28	6,617	−17.0	----	23	6,374	−27.1	----	30	6,510	−22.9	----
400	29	7,364	−26.7	----	29	7,408	−26.7	----	30	7,463	−25.1	----	30	7,327	−30.0	----	28	7,486	−23.5	----	22	7,218	−32.6	----	30	7,360	−29.5	----
350	29	8,314	−33.8	----	29	8,357	−34.0	----	30	8,418	−32.1	----	30	8,263	−37.3	----	25	8,446	−30.6	----	21	8,140	−39.8	----	30	8,298	−36.7	----
300	28	9,376	−41.9	----	29	9,418	−42.3	----	28	9,488	−40.7	----	30	9,309	−45.2	----	24	9,520	−39.0	----	20	9,171	−47.8	----	30	9,347	−44.8	----
250	23	10,582	−51.0	----	28	10,632	−51.4	----	28	10,704	−50.1	----	30	10,502	−53.7	----	22	10,744	−48.4	----	16	10,345	−54.5	----	27	10,538	−53.3	----
200	11	12,038	−58.3	----	26	12,056	−59.2	----	27	12,136	−58.0	----	22	11,901	−58.4	----	19	12,183	−57.6	----	14	11,767	−55.8	----	23	11,945	−59.0	----
175	8	12,876	−59.2	----	25	12,893	−59.7	----	24	12,972	−60.0	----	13	12,726	−57.5	----	18	13,023	−59.6	----	11	12,604	−55.3	----	20	12,804	−58.0	----
150	5	13,834	−58.7	----	20	13,867	−59.2	----	22	13,923	−60.6	----	11	13,704	−56.7	----	12	13,987	−58.6	----	6	13,596	−53.2	----	17	13,775	−57.5	----
125	----	----	----	----	12	15,015	−61.4	----	14	15,046	−63.2	----	7	14,824	−59.4	----	5	15,082	−62.2	----	----	----	----	----	12	14,946	−60.6	----
100	----	----	----	----	6	16,411	−63.1	----	5	16,427	−68.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Standard pressure surface (mb.)	Great Falls, Mont. (885.4 mb.)				Green Bay, Wis. (994.6 mb.)				Greensboro, N. C. (984.9 mb.)				Hatteras, N. C. (1,017.4 mb.)				Havana, Cuba [1] (.... mb.)				Huntington, W. Va. (996.7 mb.)				International Falls, Minn. (974.6 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	30	1,128	9.7	41	27	182	6.9	62	30	273	13.1	66	30	3	12.9	80	----	----	----	----	30	172	11.5	68	30	343	4.4	65
1,000	30	100	(*)	----	27	135	(*)	----	30	145	(*)	----	30	148	13.3	71	----	----	----	----	30	143	(*)	----	30	132	(*)	----
950	30	540	(*)	----	27	556	6.2	49	30	580	14.2	53	30	582	12.3	58	----	----	----	----	30	576	11.6	57	30	549	5.2	60
900	30	996	(*)	----	27	998	3.7	49	30	1,032	11.7	54	30	1,032	11.0	51	----	----	----	----	30	1,024	9.1	60	30	991	2.3	62
850	30	1,467	8.5	39	27	1,460	0.9	51	30	1,508	9.1	49	30	1,507	8.9	65	----	----	----	----	30	1,495	6.8	60	30	1,450	−0.4	62
800	30	1,964	4.6	43	27	1,945	−0.8	48	30	2,007	5.8	56	30	2,007	6.2	66	----	----	----	----	30	1,991	3.9	53	30	1,933	−3.1	60
750	30	2,489	0.2	52	27	2,467	−2.4	44	29	2,540	2.6	56	30	2,535	3.9	62	----	----	----	----	30	2,518	1.2	53	30	2,449	−5.5	57
700	30	3,035	−4.2	60	27	3,004	−5.3	----	29	3,088	−0.4	48	30	3,089	0.2	57	----	----	----	----	30	3,066	−2.1	52	30	2,980	−7.9	56
650	30	3,617	−8.0	59	26	3,584	−9.0	----	29	3,681	−3.7	46	30	3,681	−3.2	49	----	----	----	----	30	3,653	−5.3	51	30	3,560	−11.3	56
600	30	4,233	−11.9	58	26	4,195	−12.5	----	28	4,302	−7.3	45	30	4,309	−6.7	48	----	----	----	----	30	4,275	−8.9	50	30	4,162	−15.1	58
550	30	4,895	−16.5	54	26	4,857	−16.7	----	28	4,974	−11.7	47	30	4,980	−10.9	----	----	----	----	----	30	4,943	−13.0	50	29	4,819	−18.7	58
500	30	5,603	−21.5	----	25	5,565	−21.6	----	27	5,700	−16.5	49	29	5,703	−15.9	----	----	----	----	----	29	5,663	−17.8	52	28	5,518	−23.5	----
450	30	6,377	−27.3	----	25	6,341	−26.8	----	27	6,489	−21.8	----	28	6,495	−21.2	----	----	----	----	----	29	6,445	−23.1	----	27	6,283	−29.0	----
400	28	7,209	−33.7	----	25	7,173	−32.8	----	27	7,340	−27.9	----	27	7,349	−27.4	----	----	----	----	----	29	7,296	−28.9	----	26	7,110	−34.7	----
350	28	8,131	−40.8	----	23	8,098	−39.7	----	26	8,292	−34.5	----	27	8,296	−34.1	----	----	----	----	----	29	8,238	−35.5	----	25	8,019	−41.4	----
300	26	9,166	−48.4	----	22	9,140	−47.1	----	25	9,358	−42.2	----	27	9,360	−41.6	----	----	----	----	----	28	9,28.	−42.9	----	25	9,050	−48.4	----
250	24	10,353	−54.6	----	20	10,334	−53.0	----	25	10,567	−50.8	----	27	10,571	−49.9	----	----	----	----	----	27	10,495	−50.4	----	23	10,234	−53.6	----
200	17	11,749	−56.2	----	20	11,758	−55.1	----	22	11,973	−58.9	----	16	12,022	−57.2	----	----	----	----	----	26	11,925	−57.1	----	23	11,664	−53.4	----
175	10	12,563	−52.5	----	19	12,598	−55.0	----	21	12,805	−60.4	----	12	12,875	−59.9	----	----	----	----	----	24	12,771	−57.8	----	23	12,524	−52.4	----
150	10	13,559	−52.5	----	16	13,579	−55.5	----	17	13,761	−59.4	----	5	13,846	−61.5	----	----	----	----	----	19	13,755	−57.1	----	22	13,525	−52.2	----
125	5	14,696	−50.1	----	15	14,737	−55.7	----	12	14,911	−60.3	----	----	----	----	----	----	----	----	----	14	14,874	−58.1	----	20	14,705	−53.0	----
100	----	----	----	----	10	16,160	−57.5	----	5	16,271	−64.1	----	----	----	----	----	----	----	----	----	6	16,256	−59.4	----	16	16,140	−54.4	----
80	----	----	----	----	5	17,582	−59.2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	7	17,542	−56.5	----

Standard pressure surface (mb.)	Joliet, Ill. (996.0 mb.)				Lake Charles, La. (1,017.0 mb.)				Lander, Wyo. (835.5 mb.)				Las Vegas, Nev. (945.7 mb.)				Little Rock, Ark. (1,007.3 mb.)				Mazatlan, Mexico (1,003.6 mb.)				Medford, Oreg. (970.1 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	30	178	8.9	67	30	5	19.3	84	30	1,632	10.7	41	30	574	22.1	22	29	79	18.0	70	30	79	23.4	78	30	401	13.2	59
1,000	30	144	(*)	----	30	150	19.6	79	30	99	(*)	----	30	82	(*)	----	29	141	18.8	65	30	110	22.9	74	30	143	(*)	----
950	30	571	9.9	54	30	596	17.4	68	30	546	(*)	----	30	537	(*)	----	29	587	17.5	57	30	568	24.1	34	30	579	12.9	54
900	30	1,017	7.7	53	30	1,052	15.0	64	30	1,005	(*)	----	30	1,002	20.8	22	29	1,042	14.7	59	30	1,030	23.2	28	30	1,029	9.7	58
850	30	1,486	5.3	50	30	1,535	13.6	49	30	1,486	(*)	----	30	1,492	16.6	25	29	1,523	12.5	53	30	1,525	20.6	27	30	1,500	5.9	64
800	30	1,980	3.2	47	30	2,044	11.9	37	30	1,994	10.2	37	30	2,003	12.2	28	29	2,029	9.9	53	30	2,046	17.5	27	30	1,993	2.2	68
750	30	2,502	0.5	49	30	2,590	9.7	33	30	2,531	5.8	42	30	2,542	7.4	32	29	2,571	8.0	41	30	2,596	13.8	25	30	2,515	−1.3	68
700	30	3,051	−2.4	48	30	3,151	6.4	32	30	3,086	1.0	49	30	3,100	2.5	37	29	3,128	4.1	42	30	3,170	9.5	27	30	3,058	−4.5	62
650	30	3,634	−5.6	48	30	3,758	2.6	30	30	3,680	−3.8	53	30	3,696	−2.1	38	29	3,729	0.1	43	30	3,784	4.9	33	30	3,639	−8.0	53
600	30	4,259	−9.5	52	30	4,397	−1.7	30	30	4,304	−8.4	54	30	4,325	−6.7	39	29	4,363	−3.7	45	30	4,427	0.2	35	30	4,255	−11.8	55
550	30	4,924	−13.6	53	30	5,085	−6.4	----	30	4,974	−13.2	51	30	5,001	−11.2	35	29	5,045	−7.8	38	30	5,117	−4.7	39	30	4,916	−15.9	53
500	30	5,645	−18.2	50	30	5,822	−11.5	----	30	5,691	−18.5	52	30	5,722	−16.3	----	29	5,779	−12.9	40	29	5,862	−9.5	41	30	5,628	−20.6	51
450	30	6,428	−23.5	----	30	6,630	−17.2	----	30	6,474	−24.5	----	29	6,510	−22.3	----	29	6,581	−18.4	42	29	6,674	−15.3	41	30	6,403	−26.1	----
400	29	7,278	−29.4	----	30	7,494	−23.6	----	30	7,314	−30.9	----	29	7,359	−28.9	----	29	7,443	−24.6	----	29	7,548	−21.6	----	30	7,241	−32.7	----
350	28	8,215	−36.7	----	30	8,456	−30.8	----	30	8,246	−37.9	----	28	8,299	−36.0	----	29	8,401	−31.9	----	29	8,517	−29.5	----	30	8,167	−39.9	----
300	28	9,265	−44.1	----	30	9,531	−39.1	----	30	9,290	−46.0	----	28	9,352	−43.8	----	29	9,472	−40.0	----	29	9,596	−38.1	----	30	9,201	−47.7	----
250	28	10,466	−52.0	----	30	10,755	−48.8	----	30	10,480	−54.0	----	26	10,563	−52.0	----	28	10,684	−49.6	----	27	10,822	−47.8	----	30	10,384	−54.7	----
200	25	11,877	−57.2	----	28	12,190	−58.6	----	27	11,888	−59.6	----	25	11,990	−58.6	----	28	12,113	−59.0	----	23	12,258	−58.1	----	27	11,802	−59.2	----
175	25	12,720	−57.3	----	26	13,027	−61.7	----	26	12,725	−57.6	----	25	12,829	−58.2	----	25	12,953	−61.8	----	14	13,100	−61.6	----	25	12,647	−57.9	----
150	20	13,711	−57.1	----	24	13,978	−62.3	----	22	13,699	−56.9	----	23	13,803	−58.0	----	19	13,900	−60.4	----	6	14,029	−64.1	----	21	13,630	−55.7	----
125	19	14,863	−58.1	----	18	15,115	−65.7	----	16	14,857	−57.8	----	14	14,961	−60.1	----	15	15,040	−62.0	----	----	----	----	----	15	14,774	−56.8	----
100	10	16,285	−59.9	----	8	16,487	−68.4	----	9	16,230	−59.9	----	10	16,358	−63.2	----	----	----	----	----	----	----	----	----	----	----	----	----

See footnotes at end of table.

TABLE 1.—*Mean dynamic height (geopotential) in units of 0.98 dynamic meter, temperature in degrees centigrade, and relative humidity in percent, for standard pressures, as obtained by radiosondes during April 1946*—Continued

Standard pressure surface (mb.)	Merida, Mexico (1,010.9 mb.)				Miami, Fla. (1,018.0 mb.)				Nantucket, Mass.[3] (..... mb.)				Nashville, Tenn. (996.1 mb.)				North Platte, Nebr. (917.0 mb.)				Oakland, Calif. (1,017.6 mb.)				Ogden, Utah (864.0 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	28	27	27.1	66	30	4	22.2	76					30	180	16.4	63	30	849	12.7	56	30	2	13.8	68	30	1,355	12.3	51
1,000	28	123	26.1	67	30	159	21.8	75					30	146	(*)		30	108	(*)		30	149	12.6	69	30	105	(*)	
950	28	575	22.8	65	30	603	18.8	73					30	583	15.8	56	30	552	(*)		30	582	11.7	62	30	552	(*)	
900	28	1,044	20.2	62	30	1,065	15.9	70					30	1,041	13.2	59	30	1,007	15.0	46	30	1,030	10.7	47	30	1,010	(*)	
850	28	1,535	17.2	65	30	1,549	13.6	57					30	1,519	10.4	58	30	1,488	12.3	43	30	1,504	8.7	40	30	1,492	13.1	43
800	28	2,050	13.5	67	30	2,058	11.5	44					30	2,022	8.3	50	30	1,993	8.9	46	30	2,003	6.5	32	30	1,999	9.6	43
750	27	2,594	10.0	62	30	2,597	8.9	31					30	2,559	5.4	49	30	2,529	5.4	47	30	2,535	3.8	25	30	2,532	5.3	47
700	27	3,162	7.2	46	30	3,163	5.8	28					29	3,116	2.5	45	30	3,084	1.6	49	30	3,087	0.3		30	3,089	0.7	52
650	26	3,771	4.3	38	30	3,767	2.5						29	3,714	−1.5	46	30	3,680	−2.5	47	30	3,681	−3.6		30	3,679	−3.9	56
600	26	4,416	0.5	35	30	4,408	−1.6						28	4,346	−5.4	43	30	4,307	−6.8	47	30	4,305	−7.6		30	4,306	−8.6	58
550	25	5,108	−3.7		29	5,093	−5.9						28	5,023	−9.6	41	30	4,982	−11.7	52	30	4,977	−12.1		30	4,972	−13.4	60
500	25	5,856	−8.3		29	5,835	−10.5						28	5,752	−14.3		30	5,703	−16.9	50	28	5,697	−17.5		30	5,693	−18.7	57
450	25	6,672	−13.9		28	6,641	−15.7						28	6,549	−19.5		30	6,494	−22.2		28	6,487	−23.3		30	6,473	−24.6	
400	25	7,552	−20.4		28	7,518	−21.8						28	7,409	−25.6		30	7,340	−28.2		28	7,333	−29.7		30	7,317	−30.7	
350	25	8,525	−28.0		28	8,485	−29.7						28	8,362	−32.5		30	8,284	−35.4		28	8,271	−36.6		30	8,251	−37.9	
300	23	9,612	−36.7		28	9,564	−38.3						28	9,431	−40.3		30	9,339	−43.3		28	9,322	−44.2		30	9,295	−45.7	
250	21	10,848	−46.5		28	10,792	−48.2						27	10,649	−49.2		28	10,542	−52.5		28	10,524	−51.8		29	10,494	−53.5	
200	18	12,289	−56.8		28	12,226	−58.5						24	12,085	−56.7		22	11,947	−59.4		26	11,945	−56.6		28	11,908	−59.0	
175	7	13,120	−61.9		25	13,060	−61.6						20	12,926	−58.2		18	12,761	−59.4		23	12,788	−56.0		25	12,749	−56.9	
150					24	14,006	−64.5						14	13,872	−58.3		14	13,733	−58.4		17	13,774	−55.5		24	13,725	−57.0	
125					13	15,119	−67.5						10	14,980	−59.2		9	14,898	−59.0		11	14,952	−56.3		19	14,856	−57.2	
100																									11	16,254	−58.7	

Standard pressure surface (mb.)	Oklahoma City, Okla. (969.7 mb.)				Omaha, Nebr. (979.8 mb.)				Phoenix, Ariz. (971.6 mb.)				Pittsburgh, Pa. (971.9 mb.)				Portland, Maine (1,011.2 mb.)				Rapid City, S. Dak. (902.5 mb.)				St. Paul, Minn. (989.0 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	30	391	17.5	62	30	308	14.9	55	30	339	23.4	32	29	382	9.2	53	30	20	3.0	77	30	981	10.6	52	30	225	10.4	55
1,000	30	125	(*)		30	133	(*)		30	85	(*)		29	143	(*)		30	111	(*)		30	109	(*)		30	132	(*)	
950	30	566	18.1	58	30	573	14.3	54	30	536	25.8	24	29	574	8.7	51	30	526	2.2	71	30	550	(*)		30	564	9.6	49
900	30	1,028	15.9	53	30	1,023	11.8	54	30	1,008	22.1	25	29	1,015	6.3	51	30	961	−0.2	73	30	1,004	11.6	50	30	1,006	6.8	50
850	30	1,512	13.9	49	30	1,499	8.7	54	30	1,500	17.9	28	29	1,481	3.4	53	30	1,416	−2.8	74	30	1,482	10.6	45	30	1,473	4.1	49
800	30	2,021	11.5	43	30	1,998	6.1	50	30	2,014	13.4	31	29	1,971	1.4	45	30	1,895	−5.1	72	30	1,983	6.7	50	30	1,964	1.0	47
750	30	2,559	8.5	41	30	2,529	3.4	47	20	2,555	8.9	34	29	2,493	−1.1	47	30	2,403	−7.1	62	30	2,516	2.8	54	30	2,487	−1.7	49
700	30	3,124	5.0	39	30	3,082	0.2	51	30	3,118	4.3	39	29	3,037	−3.6	44	30	2,936	−9.6	59	30	3,064	−1.0	50	30	3,026	−4.6	51
650	30	3,727	1.1	37	30	3,673	−3.7	55	30	3,719	−0.3	39	28	3,618	−6.9	40	29	3,513	−12.1	59	30	3,656	−5.1	54	30	3,611	−7.7	45
600	30	4,364	−3.4	39	30	4,300	−7.7	49	30	4,351	−5.0	40	28	4,236	−10.8	46	29	4,115	−15.4	62	30	4,275	−9.4	56	29	4,226	−11.1	
550	28	5,046	−8.1	35	30	4,972	−12.0	47	30	5,028	−9.7		28	4,901	−15.3	55	29	4,767	−19.0	58	30	4,945	−14.0	53	29	4,892	−15.2	
500	28	5,780	−13.2		30	5,694	−16.9	42	30	5,758	−14.8		28	5,613	−20.0	58	29	5,470	−23.8		30	5,658	−18.9	53	29	5,603	−19.9	
450	26	6,578	−18.9		29	6,483	−22.4		29	6,551	−20.7		26	6,395	−25.0		28	6,233	−29.3		30	6,441	−24.4		28	6,395	−25.1	
400	26	7,438	−25.0		29	7,334	−28.5		29	7,406	−27.5		26	7,235	−30.8		27	7,059	−35.3		30	7,281	−30.8		27	7,237	−31.3	
350	25	8,396	−32.1		28	8,278	−35.6		29	8,352	−34.6		26	8,169	−37.4		27	7,976	−41.5		30	8,215	−38.0		27	8,170	−38.0	
300	25	9,466	−40.2		28	9,333	−43.1		29	9,411	−42.6		26	9,216	−44.9		27	9,008	−47.7		30	9,258	−46.0		27	9,214	−45.8	
250	23	10,684	−49.7		27	10,550	−51.6		29	10,617	−51.7		24	10,428	−51.3		26	10,197	−52.2		30	10,447	−53.9		26	10,414	−53.7	
200	22	12,118	−57.8		25	11,965	−58.6		24	12,041	−58.8		21	11,848	−56.3		25	11,637	−53.2		28	11,855	−59.3		23	11,823	−57.2	
175	21	12,960	−59.7		21	12,803	−59.0		20	12,877	−59.4		19	12,696	−55.8		22	12,485	−51.5		24	12,698	−58.5		21	12,666	−55.5	
150	16	13,911	−59.6		15	13,790	−57.9		15	13,853	−58.9		16	13,673	−55.4		20	13,482	−51.8		16	13,660	−57.1		17	13,645	−54.6	
125	12	15,049	−60.7		13	14,952	−58.8		10	14,991	−60.3		11	14,805	−55.8		16	14,652	−52.5		8	14,772	−56.6		16	14,797	−55.6	
100	6	16,446	−63.9						5	16,344	−64.4		8	16,232	−57.9		9	16,094	−54.0						10	16,219	−56.8	
80																									6	17,632	58.2	

Standard pressure surface (mb.)	San Antonio, Tex. (987.9 mb.)				San Juan, P. R. (1,015.6 mb.)				Santa Maria, Calif. (1,008.4 mb.)				Sault Ste. Marie, Mich. (989.2 mb.)				Spokane, Wash. (945.7 mb.)				Swan Island, W. I. (1,013.9 mb.)				Tacubaya, Mexico (774.4 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	29	240	21.0	69	29	15	24.4	79	30	71	12.1	79	30	221	1.8	77	30	598	10.3	63	30	10	25.3	80	30	2,306	16.9	53
1,000	29	133	(*)		29	150	23.4	79	30	141	11.3	79	30	133	(*)		30	128	(*)		30	131	24.3	81	30	59	(*)	
950	29	578	19.8	66	29	596	19.9	82	30	581	12.2	66	30	552	1.5	70	30	563	(*)		30	582	20.8	81	30	520	(*)	
900	29	1,043	17.6	65	29	1,061	16.7	79	30	1,025	12.7	46	30	981	−0.2	66	30	1,009	8.4	55	30	1,047	18.2	73	30	1,001	(*)	
850	29	1,531	15.7	57	29	1,547	14.2	69	30	1,503	10.2	41	30	1,437	−2.3	64	30	1,478	4.7	59	30	1,534	15.4	66	30	1,498	(*)	
800	29	2,044	13.8	47	29	2,057	11.7	63	30	2,004	7.1	38	30	1,917	−4.1	62	30	1,968	0.6	66	30	2,046	12.5	60	30	2,028	(*)	
750	29	2,589	11.2	42	29	2,598	9.8	37	30	2,537	4.2	28	30	2,429	−6.3	58	30	2,484	−3.3	69	30	2,589	9.4	55	30	2,582	14.7	51
700	29	3,158	8.1	34	29	3,165	7.2		30	3,089	0.9		30	2,961	−9.0	58	30	3,025	−6.9	68	30	3,154	6.4	48	30	3,158	10.3	54
650	29	3,765	4.0	36	28	3,772	4.2		30	3,683	−3.0		30	3,540	−11.6	51	30	3,602	−10.4	65	30	3,764	3.5	37	30	3,774	5.4	62
600	29	4,410	−0.8	41	27	4,418	0.8		30	4,309	−7.3		30	4,140	−15.0	48	30	4,212	−14.2	63	30	4,405	0.7	29	30	4,419	0.3	69
550	29	5,094	−5.6	40	27	5,110	−3.3		30	4,978	−11.9		30	4,799	−18.8	48	30	4,869	−18.2	67	30	5,099	−3.1	25	30	5,111	−4.8	73
500	29	5,839	−10.5	33	27	5,859	−7.6		30	5,701	−17.0		30	5,497	−23.5		30	5,571	−23.0		30	5,848	−7.5		30	5,855	−9.3	68
450	28	6,649	−15.8		27	6,680	−12.6		30	6,487	−22.8		30	6,266	−29.0		30	6,342	−28.6		30	6,673	−12.7		29	6,673	−14.2	56
400	27	7,521	−21.8		27	7,560	−18.8		30	7,337	−29.1		30	7,094	−34.8		30	7,168	−34.6		30	7,550	−19.2		29	7,550	−20.1	43
350	27	8,489	−29.1		27	8,541	−25.9		30	8,277	−36.4		30	8,012	−41.4		30	8,088	−40.9		30	8,528	−26.9		29	8,525	−27.7	
300	26	9,570	−37.5		27	9,638	−34.2		30	9,328	−43.8		30	9,043	−47.8		30	9,119	−48.1		30	9,621	−35.1		28	9,614	−36.4	
250	24	10,803	−46.5		27	10,888	−44.1		29	10,535	−52.0		28	10,235	−52.1		29	10,296	−54.9		29	10,867	−44.7		28	10,852	−46.2	
200	24	12,252	−55.7		27	12,347	−55.5		25	11,967	−57.4		25	11,669	−52.9		23	11,684	−56.0		28	12,325	−56.1		23	12,300	−57.0	
175	21	13,091	−58.4		26	13,185	−62.0		21	12,807	−58.0		25	12,531	−52.2		21	12,534	−54.1		24	13,170	−61.5		12	13,140	−61.7	
150	18	14,044	−60.4		20	14,127	−67.9		17	13,788	−57.4		24	13,533	−51.8		17	13,532	−52.4		19	14,109	−67.1					
125	14	15,176	−62.8		8	15,203	−71.8		12	14,956	−59.8		19	14,715	−53.0		13	14,709	−53.5		7	15,202	−71.4					
100	6	16,524	−67.7						8	16,360	−62.0		14	16,151	−54.9		9	16,130	−53.9									

See footnotes at end of table.

TABLE 1.—*Mean dynamic height (geopotential) in units of 0.98 dynamic meter, temperature in degrees centigrade, and relative humidity in percent, for standard pressures, as obtained by radiosondes during April 1946*—Continued

Standard pressure surface (mb.)	Tampa, Fla. (1,018.7 mb.)				Tatoosh Island, Wash. (1,014.6 mb.)				Toledo, Ohio (994.0 mb.)				Washington, D. C. (1,013.7 mb.)			
	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity	Number of observations	Dynamic height	Temperature	Relative humidity
Surface	30	3	20.5	70	30	31	7.5	85	30	191	7.8	65	30	25	12.6	57
1,000	30	163	20.1	72	30	150	6.6	86	30	140	(*)		30	138	12.1	52
950	30	607	17.9	61	30	573	3.8	86	30	564	8.0	54	30	567	9.9	51
900	30	1,055	15.7	56	30	1,007	1.2	83	30	1,009	5.7	53	30	1,014	7.1	54
850	30	1,549	13.7	43	30	1,466	−1.4	80	30	1,474	3.3	54	30	1,482	4.6	55
800	30	2,057	11.4	39	30	1,946	−3.8	70	30	1,964	1.2	47	30	1,974	2.4	54
750	30	2,597	8.7	34	30	2,458	−6.7	66	30	2,487	−1.2	46	30	2,497	−0.4	55
700	30	3,161	5.5	----	30	2,988	−9.8	64	30	3,028	−3.9	44	30	3,042	−3.5	57
650	30	3,763	2.3	----	30	3,563	−12.5	55	30	3,613	−7.0	36	29	3,628	−6.6	52
600	30	4,403	−1.7	----	30	4,164	−15.9	59	30	4,230	−10.3	37	29	4,245	−10.2	49
550	30	5,087	−6.1	----	30	4,817	−19.9	65	30	4,899	−14.5	42	28	4,912	−14.2	49
500	30	5,829	−11.0	----	30	5,516	−24.3	----	30	5,611	−19.4	48	27	5,618	−19.2	51
450	30	6,636	−16.6	----	30	6,282	−28.9	----	30	6,391	−25.0	----	27	6,399	−24.5	----
400	30	7,505	−23.1	----	28	7,116	−34.5	----	30	7,233	−31.1	----	27	7,241	−30.6	----
350	30	8,468	−30.4	----	28	8,036	−40.9	----	28	8,163	−37.8	----	27	8,176	−37.6	----
300	29	9,543	−38.9	----	25	9,069	−47.7	----	28	9,207	−45.4	----	27	9,224	−44.8	----
250	29	10,767	−48.7	----	24	10,242	−54.2	----	26	10,421	−52.3	----	27	10,422	−51.9	----
200	28	12,200	−59.0	----	19	11,655	−56.0	----	23	11,850	−57.4	----	25	11,843	−56.9	----
175	27	13,028	−62.3	----	15	12,490	−53.1	----	22	12,691	−56.6	----	21	12,671	−56.9	----
150	23	13,972	−63.7	----	12	13,506	−52.5	----	15	13,671	−55.0	----	17	13,626	−55.5	----
125	11	15,081	−67.2	----	8	14,712	−53.2	----	11	14,858	−56.6	----	14	14,810	−57.0	----
100	----	----	----	----	----	----	----	----	----	----	----	----	10	16,206	−60.3	----

[1] Data not yet received.
[2] Insufficient observations.
*Temperature and relative humidity data for this level are not available or are available only for certain days. See note entitled "Change in Summarization of Radiosonde Data," p. 6, in the January 1946 issue of the MONTHLY WEATHER REVIEW.

NOTE.—All observations scheduled between 0300 and 0500 G. C. T. except at Mazatlan and Merida, where they are taken near 0200 G. C. T.

"Number of observations" refers to those of dynamic height only. (In a few cases temperature or humidity data may be missing for one or more standard pressure surfaces of some observations.) Relative humidity data are not published for standard pressure surfaces having a corresponding mean temperature below −20° C.

All relative humidity observations are obtained by electric hygrometer and have been adjusted to compensate for the values occurring below the operating range of the humidity element. For explanation of the adjustment see article entitled "Curve Method for Obtaining Monthly Means of Relative Humidity," p. 241, MONTHLY WEATHER REVIEW, December 1944.

None of the means included in these tables are based on less than 15 observations at the surface or 5 observations at a standard pressure level.

TABLE 2.—*Free-air resultant winds based on pilot balloon observations made near 5 p. m., E. S. T. (2200 G. C. T.) during April 1946. Directions given in degrees from north (N=360°, E=90°, S=180°, W=270°). Velocities in meters per second*

Altitude (meters) m. s. l.	Abilene, Tex. (534 m.)			Albuquerque, N. Mex. (1,630 m.)			Atlanta, Ga. (299 m.)			Billings, Mont. (1,095 m.)			Bismarck, N. Dak. (512 m.)			Boise, Idaho (868 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	30	156	3.1	30	222	2.7	29	255	1.8	30	272	2.6	30	253	2.6	30	346	1.9
500	----	----	----	----	----	----	29	266	2.1	----	----	----	----	----	----	----	----	----
1,000	30	161	2.8	----	----	----	29	268	3.4	----	----	----	30	285	2.9	30	345	2.0
1,500	28	192	2.4	----	----	----	29	269	4.6	30	277	3.7	29	275	3.9	30	310	1.8
2,000	28	245	3.0	30	239	3.3	27	285	5.4	30	270	5.6	29	275	6.2	30	277	2.4
2,500	28	243	4.5	30	245	3.1	21	292	6.7	30	257	4.8	27	277	7.9	29	243	4.4
3,000	28	249	6.0	30	242	3.6	18	292	6.2	28	262	7.5	25	279	9.8	26	243	5.4
4,000	26	254	8.5	28	257	4.8	14	293	8.1	26	268	11.0	18	297	11.5	24	253	8.0
5,000	23	258	9.0	22	270	7.4	12	301	10.9	21	273	13.2	15	298	12.9	21	257	9.5
6,000	20	262	11.0	21	256	10.8	12	299	14.3	17	271	13.3	14	290	15.2	19	261	11.4
8,000	13	262	13.2	20	253	12.0	----	----	----	11	277	16.5	13	281	21.7	13	258	15.8
10,000	----	----	----	18	250	15.5	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Brownsville, Tex. (7 m.)			Buffalo, N. Y. (220 m.)			Burlington, Vt. (100 m.)			Charleston, S. C. (16 m.)			Cincinnati, Ohio (150 m.)			Denver, Colo. (1,627 m.)			El Paso, Tex. (1,198 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	30	125	5.7	30	257	4.3	28	277	1.5	29	229	1.5	29	259	1.0	30	103	0.4	30	23	1.4
500	30	135	6.9	30	264	5.8	28	272	3.1	29	230	3.4	29	257	2.1	----	----	----	----	----	----
1,000	24	151	6.6	29	267	7.4	28	280	4.5	29	263	4.9	29	258	3.4	----	----	----	----	----	----
1,500	20	174	3.5	23	270	8.4	24	286	6.7	26	275	7.2	25	265	5.7	----	----	----	30	205	2.5
2,000	18	184	2.0	19	284	8.1	17	278	7.7	24	292	8.6	21	290	7.5	30	153	0.4	30	210	2.8
2,500	16	231	2.7	14	303	9.1	13	292	9.5	22	293	9.0	19	292	8.1	30	217	0.9	30	301	3.2
3,000	15	276	2.4	12	303	9.8	12	297	12.1	22	292	9.2	18	297	9.6	26	261	1.8	30	222	3.8
4,000	14	255	4.1	----	----	----	----	----	----	17	300	10.8	----	----	----	26	247	6.2	30	246	5.7
5,000	13	259	4.1	----	----	----	----	----	----	15	298	12.9	----	----	----	21	272	10.3	25	254	6.5
6,000	11	263	5.4	----	----	----	----	----	----	14	300	15.9	----	----	----	17	278	15.4	18	254	10.5
8,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	11	295	14.4	----	----	----
10,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	Ely, Nev. (1,910 m.)			Grand Junction, Colo. (1,413 m.)			Greensboro, N. C. (271 m.)			Havre, Mont. (767 m.)			Jacksonville, Fla. (16 m.)			Joliet, Ill. (178 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	30	217	2.2	29	242	2.5	28	251	2.5	29	266	3.1	29	100	1.1	30	237	0.9
500	----	----	----	----	----	----	28	248	3.4	----	----	----	29	245	0.9	30	263	1.9
1,000	----	----	----	----	----	----	28	246	4.9	29	267	4.6	27	258	2.2	29	248	3.3
1,500	----	----	----	29	242	2.3	27	256	4.1	29	266	5.0	27	263	3.1	29	267	6.3
2,000	30	216	2.5	29	260	1.9	25	276	7.4	29	261	6.4	27	276	4.0	27	279	7.3
2,500	30	215	2.8	29	231	2.4	24	287	9.9	26	257	8.8	27	282	6.1	25	288	8.5
3,000	27	214	2.8	28	227	3.4	22	290	11.9	20	259	10.3	24	278	6.8	22	296	11.0
4,000	24	232	4.2	22	256	5.0	19	302	14.2	16	259	12.5	21	290	7.9	16	313	12.6
5,000	22	248	6.1	17	258	7.3	17	299	16.2	----	----	----	19	294	10.3	13	304	16.0
6,000	18	251	9.0	16	266	10.2	13	312	16.3	----	----	----	18	295	12.7	----	----	----
8,000	14	269	9.5	----	----	----	----	----	----	----	----	----	15	301	15.7	----	----	----
10,000	12	263	15.6	----	----	----	----	----	----	----	----	----	12	298	18.5	----	----	----

Altitude (meters) m. s. l.	Las Vegas, Nev. (573 m.)			Little Rock, Ark. (88 m.)			Medford, Oreg. (416 m.)			Miami, Fla. (12 m.)			Mobile, Ala. (66 m.)			Nashville, Tenn. (194 m.)			New York, N. Y. (15 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	30	178	1.3	27	192	2.1	30	317	1.7	30	119	3.7	30	199	2.4	29	247	1.4	28	289	2.4
500	----	----	----	27	205	2.7	30	311	2.0	30	111	3.6	30	205	3.0	29	234	2.5	28	278	5.8
1,000	30	189	2.3	27	215	3.1	30	294	2.1	29	90	0.9	27	236	1.6	29	245	3.9	26	289	8.9
1,500	30	194	2.2	24	240	3.5	30	234	2.7	29	294	0.5	24	246	1.9	29	262	5.8	25	292	9.4
2,000	30	203	2.7	22	253	4.7	28	211	3.6	27	276	2.0	24	243	2.1	28	270	6.8	20	310	10.9
2,500	30	218	3.4	20	262	6.0	27	207	4.4	25	276	3.0	22	246	2.3	28	277	8.3	17	314	15.8
3,000	30	221	4.0	20	263	7.1	26	215	4.9	24	262	2.8	20	253	4.3	26	274	9.5	15	316	18.1
4,000	27	225	6.1	20	269	9.5	20	238	8.1	18	296	3.4	15	277	5.5	24	279	11.9	11	317	19.6
5,000	26	236	7.7	18	285	11.9	19	247	9.7	17	281	4.4	----	----	----	22	285	15.6	----	----	----
6,000	23	246	8.9	15	298	12.8	16	261	11.3	17	289	7.5	----	----	----	15	294	14.7	----	----	----
8,000	21	242	12.7	15	296	17.4	13	261	13.2	14	286	14.4	----	----	----	----	----	----	----	----	----
10,000	14	251	15.2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

TABLE 2.—*Free-air resultant winds based on pilot balloon observations made near 5 p. m., E. S. T. (2200 G. C. T.) during April 1946. Directions given in degrees from north (N=360°, E=90°, S=180°, W=270°). Velocities in meters per second*—Continued

	Oakland, Calif. (8 m.)			Oklahoma City, Okla. (396 m.)			Omaha, Nebr. (306 m.)			Phoenix, Ariz. (338 m.)			Rapid City, S. Dak. (982 m.)			St. Louis, Mo. (181 m.)			St. Paul, Minn. (225 m.)			San Antonio, Tex. (240 m.)			San Diego, Calif. (15 m.)			Sault Ste. Marie, Mich. (225 m.)			Seattle, Wash. (116 m.)			Spokane, Wash. (608 m.)			Washington, D. C. (24 m.)		
Surface	30	262	5.4	29	180	2.5	29	223	1.0	30	235	0.8	30	10	1.7	29	7	0.4	30	299	1.7	30	124	2.7	29	263	3.9	26	280	3.1	29	225	2.8	29	229	2.8	28	272	3.1
500	30	288	3.4	29	184	2.6	29	206	1.2	30	240	1.1	----	----	----	29	290	1.2	30	290	1.7	30	138	3.5	29	281	2.8	26	278	4.2	29	224	4.6	----	----	----	28	282	5.0
1,000	27	304	2.4	27	183	3.0	29	213	1.4	30	234	1.5	30	9	1.7	28	257	2.6	28	311	2.9	30	141	3.2	25	268	1.7	25	278	4.2	27	218	5.2	29	227	4.7	27	280	5.9
1,500	26	235	1.6	26	214	3.8	27	237	2.4	30	214	1.9	30	317	2.9	27	256	4.1	27	291	4.2	28	154	3.0	25	261	1.4	23	294	6.1	26	216	5.4	29	230	5.7	26	287	9.0
2,000	26	237	2.2	23	247	5.2	25	271	2.3	30	202	3.0	30	284	3.4	26	266	6.9	25	292	5.6	25	187	3.7	25	251	1.6	22	298	6.7	21	220	6.6	26	236	6.2	26	296	11.9
2,500	25	244	2.9	23	257	7.0	25	277	5.3	30	200	4.0	28	262	4.9	23	284	9.2	23	304	9.7	22	207	3.2	23	276	2.1	18	294	7.7	18	238	7.6	20	228	9.0	25	302	15.0
3,000	24	242	3.8	21	272	8.0	25	287	8.4	29	207	4.4	26	267	7.0	20	291	10.8	21	306	12.0	21	220	2.5	21	274	3.9	14	301	8.9	16	246	8.2	16	234	7.8	21	302	16.8
4,000	22	240	4.0	20	276	9.5	21	289	13.1	27	228	5.1	25	278	11.7	19	288	14.2	19	307	15.6	19	248	4.1	21	258	5.6	10	319	13.5	----	----	----	----	----	----	16	301	22.0
5,000	20	253	6.3	20	278	10.8	19	296	15.3	26	245	5.5	20	282	17.7	15	296	16.5	15	306	17.1	17	288	5.9	18	249	8.4	----	----	----	----	----	----	----	----	----	13	301	23.9
6,000	19	257	6.7	16	284	10.7	17	295	16.8	23	247	6.0	17	281	20.0	10	308	20.4	11	307	18.6	16	265	7.1	18	244	10.7	----	----	----	----	----	----	----	----	----	13	300	27.6
8,000	17	260	12.1	11	292	10.8	----	----	----	22	256	9.1	----	----	----	----	----	----	----	----	----	13	261	11.8	12	251	16.3	----	----	----	----	----	----	----	----	----	----	----	----
10,000	11	242	13.1	----	----	----	----	----	----	13	265	8.4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
12,000	----	----	----	----	----	----	----	----	----	10	262	11.3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

TABLE 3.—*Maximum free-air wind velocities (m. p. s.) for different sections of the United States based on pilot balloon observations during April 1946*

Section	Surface to 2,500 meters (m. s. l.)					Above 2,500 to 5,000 meters (m. s. l.)					Above 5,000 meters (m. s. l.)				
	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station
Northeast [1]	40.0	NNW.	2,164	17	Albany, N. Y.	42.4	NNW.	4,816	7	Philipsburg, Pa.	64.8	NW.	9,477	19	Caribou, Maine.
East-Central [2]	43.3	NW.	2,500	5	Lynchburg, Va.	49.2	WNW.	4,705	4	Knoxville, Tenn.	68.4	W.	15,204	17	Richmond, Va.
Southeast [3]	33.3	W.	2,266	12	Jacksonville, Fla.	47.2	NW.	4,657	27	Spartanburg, S. C.	65.0	WNW.	16,001	29	Charleston, S. C.
North-Central [4]	29.4	SW.	1,362	19	Alpena, Mich.	58.8	WNW.	4,892	2	Milwaukee, Wis.	68.7	NW.	8,407	18	Marquette, Mich.
Central [5]	46.0	WSW.	1,405	1	Kansas City, Mo.	44.0	NNW.	5,000	26	Columbia, Mo.	80.0	WSW.	11,170	4	Columbia, Mo.
South-Central [6]	37.4	SW.	1,008	1	Oklahoma City, Okla.	40.6	WNW.	4,680	30	San Antonio, Tex.	75.2	WNW.	17,824	1	Waco, Tex.
Northwest [7]	37.0	W.	1,474	26	Great Falls, Mont.	57.5	WSW.	2,900	17	Glasgow, Mont.	69.9	SW.	11,733	25	Tatoosh Island, Wash.
						46.7	NW.	2,867	3	Cheyenne, Wyo.					
West-Central [8]	43.2	WNW.	2,500	3	Cheyenne, Wyo.	46.7	SW.	3,619	29	Elko, Nev.	67.2	W.	10,196	9	Pueblo, Colo.
Southwest [9]	42.2	W.	2,500	7	Raton, N. Mex.	51.5	WSW.	5,000	1	Raton, N. Mex.	80.6	WSW.	7,437	1	Raton, N. Mex.

[1] Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and northern Ohio.
[2] Delaware, Maryland, Virginia, West Virginia, southern Ohio, Kentucky, eastern Tennessee, and North Carolina.
[3] South Carolina, Georgia, Florida, and Alabama.
[4] Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota.
[5] Indiana, Illinois, Iowa, Nebraska, Kansas, and Missouri.
[6] Mississippi, Arkansas, Louisiana, Oklahoma, Texas (except El Paso), and western Tennessee.
[7] Montana, Idaho, Washington, and Oregon.
[8] Wyoming, Colorado, Utah, northern Nevada, and northern California.
[9] Southern California, southern Nevada, Arizona, New Mexico, and extreme west Texas.

RIVER STAGES AND FLOODS FOR APRIL 1946

By C. R. JORDAN

Precipitation during April was below normal over most of the country, with large areas receiving less than one-half of the usual amount. Many stations had less than one-fourth of their normal rainfall. The exceptions to the below-normal precipitation were the Carolinas; southern Texas; Arkansas, southern Missouri, and western Tennessee; northern New England; the coastal area of Washington; and a few scattered areas in Nevada, Arizona, and Colorado.

There was no extensive flooding during the month. High stages in some streams were carried over from March, and there was some overflow in Idaho due to early snow melt.

Atlantic Slope and East Gulf of Mexico drainage.—Several stations in the Southeastern States were a little above flood stage during the first days of the month, but precipitation was light during April, and practically all of the streams fell below flood stage during the first week. Heavy rains fell in southern Alabama on the 24th and 25th, resulting in very light overflow of the lower Choctawhatchee River. The lower Tombigbee and Pearl Rivers fell below flood stage for the first time since January.

Mississippi System.—The Mississippi River was in moderate flood at the beginning of April from Gordons Ferry, Iowa, to Grafton, Ill., but fell steadily and was within its banks in a few days. Flood stages were reached at numerous stations scattered throughout the Mississippi Basin.

Rivers in the Yazoo Basin fell below flood stage for the first time since January. They were at moderate stages at the beginning of January; as a result of general rains averaging about 8 inches from January 3–11, there were rapid rises, with flood stage reached at Swan Lake, Miss., on the 7th, at Greenwood on the 14th, and at Yazoo City on the 15th. For the 3 months, January, February, and March, rainfall over the Yazoo Basin averaged more than 25 inches and was fairly well distributed throughout the period, so that flood stage or above was maintained for 102 consecutive days at Swan Lake, 54 days at Greenwood, and 104 days at Yazoo City. Following the heavy rains of February 9–10, the stage at Greenwood reached a peak of 39.8 feet on February 17, the second highest gage reading of record for that place.

The total area overflowed in the Yazoo and Big Black Basins amounted to approximately one and one-fourth million acres, of which an estimated 300,000 acres was cultivable land. As there was little agricultural activity at the time of this flood, the loss of growing or of prospective crops was not large. While much land was still under water at the close of April, a considerable area

was free of water early enough in the season for normal planting.

West Gulf of Mexico drainage.—There was light overflow at a few places in eastern Texas and Louisiana during the early part of the month.

Pacific Slope drainage.—Stream flow was greatly above normal in the Northwest due to an early melting of a heavy snow cover in Idaho, western Montana, and northern Utah. Some flooding was reported in Idaho and northern Utah.

FLOOD STAGE REPORT FOR APRIL 1946

[All dates in April, unless otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest [1]	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE					
	Feet			*Feet*	
Saluda: Pelzer, S. C.	6	Mar. 29	1	6.5	Mar. 29
		30	(2)		
Savannah: Butler Creek, Ga.	21	Mar. 31	Mar. 31	21.4	Mar. 31
Ocmulgee: Abbeville, Ga.	11	4	8	11.9	6
Altamaha:					
Charlotte, Ga.	12	Mar. 31	14	14.5	9–10
Piney Bluff, Ga.	17	8	11	17.2	10
EAST GULF OF MEXICO DRAINAGE					
Flint: Albany, Ga.	20	1	1	21.2	1
Apalachicola:					
Chattahoochee, Fla.	20	Mar. 31	4	21.5	2
Blountstown, Fla.	15	Mar. 11	23	19.2	Mar. 21–22
				21.7	3
				16.7	15
				15.4	22
		26	(2)	15.6	28–29
Choctawhatchee:					
Geneva, Ala.	23	Mar. 29	1	26.6	Mar. 31
Caryville, Fla.	12	28	28	12.2	28
Coosa: Gadsden, Ala.	20	Mar. 29	6	23.8	Mar. 31
Alabama:					
Montgomery, Ala.	35	Mar. 31	3	39.4	1
Millers Ferry, Ala.	40	Mar. 30	7	44.4	4
Tombigbee:					
Lock No. 4, Demopolis, Ala.	39	Mar. 29	4	43.7	2
Lock No. 3, Ala.	33	Jan. 7	7	59.0	Jan. 23
				45.0	Feb. 4
				61.0	Feb. 21
				42.8	Mar. 12
				46.7	Mar. 21
Lock No. 2, Ala.	46	Mar. 30	4	46.2	2
				47.9	3
Lock No. 1, Ala.	31	Jan. 9	8	40.7	Jan. 26
				43.5	Feb. 25
				34.1	Mar. 23, Apr. 4
Pearl:					
Jackson, Miss.	18	Mar. 16	9	26.7	Mar. 27
Monticello, Miss.	15	Mar. 29	Mar. 31	15.2	Mar. 30
Pearl River, La.	12	Jan. 8	11	14.0	Jan. 12, 25.
				16.0	Feb. 27
				15.2	Mar. 18
				14.8	Mar. 29
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Rock: Moline, Ill.	10	Mar. 4	4	12.4	Mar. 20–21.
Illinois:					
Havana, Ill.	14	Mar. 19	3	15.0	Mar. 25

FLOOD STAGE REPORT FOR APRIL 1946—Continued

[All dates in April, unless otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest [1]	
		From—	To—	Stage	Date
MISSISSIPPI SYSTEM—Continued					
Upper Mississippi Basin—Continued					
Illinois—Continued	*Feet*			*Feet*	
Beardstown, Ill.	14	Mar. 20	4	15.2	Mar. 27–29.
Mississippi:					
Gordons Ferry, Iowa.	13	Mar. 18	6	16.1	Mar. 27–28
Clinton, Iowa.	16	Mar. 26	1	16.6	Mar. 29
Muscatine, Iowa.	15	Mar. 21	4	16.8	Mar. 28–30
Keithsburg, Ill.	12	Mar. 19	4	13.7	Mar. 29
Burlington, Iowa.	15	Mar. 27	1	15.2	Mar. 29
Keokuk, Iowa.	12	Mar. 15	8	16.0	Mar. 29–30
Gregory Landing, Mo.	12	Mar. 14		15.3	Mar. 18
				16.2	Mar. 29
Quincy, Ill.	14	Mar. 15	8	18.5	Mar. 26
				18.2	Mar. 30
Hannibal, Mo.	13	Mar. 9	9	18.7	Mar. 26
				18.3	Mar. 30
Louisiana, Mo.	12	Mar. 6		17.1	Mar. 26–27
Grafton, Ill.	18	Mar. 21	5	16.6	Mar. 30
				19.4	Mar. 29
Missouri Basin					
Osage: La Cygne, Kans.	25	24	25	26.9	24
Ohio Basin					
Ohio: Cairo, Ill.	40	Mar. 26	4	41.3	Mar. 31
White Basin					
White:					
Clarendon, Ark.	26	Feb. 10		29.4	Feb. 26–27
				27.9	Mar. 31
St. Charles, Ark.	25	Jan. 15		28.3	Jan. 24–26
				26.2	Mar. 31
Red Basin					
Ouachita:					
Camden, Ark.	26	Mar. 29		45.3	Feb. 24–25, 27
Monroe, La.	40	Jan. 23	25	42.4	3
Black: Jonesville, La.	50	Jan. 30	14	52.9	Feb. 21–24
				50.8	4
Lower Mississippi Basin					
Tallahatchie: Swan Lake, Miss.	26	Jan. 7	19	31.8	Jan. 13
				32.0	Feb. 13
				27.9	Mar. 11, 17, 19
				28.8	3
Yazoo: Yazoo City, Miss.	29	Jan. 14	28	37.0	Feb. 10
Atchafalaya Basin					
Atchafalaya: Atchafalaya, La.	25	Feb. 15	17	26.9	Mar. 3–5
				26.0	7–12
WEST GULF OF MEXICO DRAINAGE					
Calcasieu: Kinder, La.	16	Mar. 30	3	16.4	Mar. 31
Sabine:					
Gladewater, Tex.	26	1	8	29.7	5
Logansport, La.	25	Mar. 28	Mar. 31	25.2	Mar. 30
Milam, Tex.	30	Mar. 28			
Bon Wier, Tex.	17	Mar. 28	9	18.6	5
Trinity: Liberty, Tex.	24	Mar. 30	Mar. 31	24.1	Mar. 31
San Antonio: Cibolo Creek, Tex.	26	23	23	26.0	23
Nueces: Cotulla, Tex.	15	24	26	18.1	24

[1] Provisional.

[2] Continued at end of month.

CLIMATOLOGICAL DATA FOR APRIL 1946

CONDENSED CLIMATOLOGICAL SUMMARY OF TEMPERATURE AND PRECIPITATION BY SECTIONS

[For description of tables and charts, see Review, January 1943, p. 15]

In the following table are given for the various sections of the climatological service of the Weather Bureau the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures, with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data as indicated by the several headings.

The mean temperature for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course, the number of such records is smaller than the total number of stations.

Section	Temperature							Precipitation					
	Section average	Departure from the normal	Monthly extremes					Section average	Departure from the normal	Greatest monthly		Least monthly	
			Station	Highest	Date	Station	Lowest	Date			Station	Amount	Station	Amount
	°F.	°F.		°F.			°F.		In.	In.		In.		In.
Alabama	67.0	+3.5	3 stations	91	[1]7	Valley Head	30	13	3.02	−1.61	Brewton	8.80	Robertsdale	0.62
Arizona	63.2	+4.8	2 stations	105	[1]17	Alpine	5	3	.82	+.14	Fort Valley	4.56	5 stations	.00
Arkansas	65.0	+3.4	do	94	1	2 stations	30	[1]16	5.46	+.44	Abbott	12.14	Dermott	1.75
California	57.2	+1.2	Greenland Ranch	113	24	Tamarack	−8	2	.36	−1.32	Elk Valley	2.52	23 stations	.00
Colorado	49.8	+6.0	Eversoll Ranch	95	2	Taylor Park	−5	4	1.40	−1.42	Wolf Creek Pass	5.55	Monte Vista	.14
Florida	71.4	+1.5	La Belle	97	[1]10	2 stations	40	[1]14	1.22	−1.67	Hilliard	4.22	7 stations	.00
Idaho	47.5	+2.3	Lewiston	99	25	Spencer	2	1	1.00	−.44	Pierce	3.34	2 stations	.02
Illinois	56.0	+3.5	East St. Louis	92	1	Freeport	21	[1]12	1.97	−1.59	Cairo	4.61	Galena	.33
Indiana	54.2	+2.3	4 stations	89	[1]21	4 stations	23	[1]12	1.72	−1.86	Vevay	2.88	Decatur	.26
Iowa	53.9	+5.1	Little Sioux	91	19	Decorah	15	27	1.23	−1.49	Tingley	4.06	Waukon	.30
Kansas	60.4	+5.6	Ashland	97	1	Oberlin	22	16	1.64	−1.04	Wagstaff	7.42	4 stations	T
Kentucky	59.6	+3.4	Pikesville	92	3	2 stations	24	13	2.13	−1.84	Benham	3.76	Valley View	.78
Louisiana	69.8	+2.7	2 stations	92	[1]6	Robeline	38	[1]13	3.21	−1.45	Arcadia	6.82	Amite	.63
Maryland-Delaware	52.2	−.1	Fort George G. Meade, Md.	92	23	Oakland, Md	16	11	1.98	−1.51	Snow Hill, Md	4.43	Cumberland, Md	.46
Michigan	44.7	+1.9	6 stations	84	22	Kenton	8	10	.92	−1.43	Ontonagon	2.37	Stephenson	.11
Minnesota	47.6	+4.5	Winona	87	21	4 stations	14	[1]6	1.14	−.95	Tower	3.29	Wells	.21
Mississippi	67.6	−3.0	2 stations	92	[1]3	Holly Springs	34	13	2.27	−2.58	Holly Bluff	4.35	Pelahatchee	.09
Missouri	59.6	+4.3	do	94	1	Black (near)	25	17	3.37	−.66	Anderson	6.41	Tarkio	.44
Montana	47.5	+4.2	Jordan	90	26	Wise River	−5	2	.52	−.61	Belton	2.05	Harlowton	.04
Nebraska	56.1	+6.8	Alma	98	19	Gordon	20	11	.67	−1.73	Big Spring	2.30	2 stations	.00
Nevada	52.8	+4.7	Overton	102	24	Sheldon	7	30	.40	−.40	Lamoille	1.57	6 stations	.00
New England	42.4	−1.3	Adams, Mass	86	23	First Conn. Lake, N. H.	0	1	2.68	−.66	Eastport, Maine	6.35	Montpelier, Vt	1.43
New Jersey	50.1	+.3	3 stations	83	23	Layton	19	8	1.51	−2.10	Charlotteburg	2.63	Layton	.79
New York	43.9	−.3	Port Jervis	87	23	Lake Placid Club	6	1	1.84	−1.16	Stillwater Reservoir	3.61	Olean	.66
North Carolina	59.5	+1.5	Henderson	96	22	Mount Mitchell	16	13	3.89	+.31	McCullers	7.22	Hofmann Forest	1.72
North Dakota	48.2	+6.6	Sanish	87	30	Golva	9	8	.67	−.75	Lisbon	2.56	Tioga	T
Ohio	50.8	+1.0	Ironton	90	23	Mineral Ridge	18	11	1.63	−1.55	Higginsport	4.01	Tiffin	.55
Oklahoma	65.1	+4.6	Bartlesville	99	1	Hooker	26	11	2.85	−.65	Kiamichi Tower	9.38	Woodward	T
Oregon	47.7	+.5	2 stations	95	25	Olive Lake	5	1	1.01	−.95	Valsetz	8.08	Paisley	.00
Pennsylvania	47.7	−.9	4 stations	88	[1]22	Kane	13	11	1.19	−2.22	Donegal	2.78	Lewistown	.49
South Carolina	63.8	+1.4	Walterboro	95	3	Walhalla	29	13	3.71	+.45	Trenton	6.50	Crescent	1.98
South Dakota	52.9	+6.9	3 stations	90	[1]1	Ludlow	16	8	1.40	−.65	Spearfish	4.55	DeSmet	.25
Tennessee	62.0	+3.3	Carthage	91	21	Rugby	25	13	3.04	−1.36	Gatlinburg	5.88	Linden	1.53
Texas	69.6	+3.5	2 stations	103	[1]1	Stratford	29	11	2.83	−.09	Big Wells	11.32	Pecos	.00
Utah	51.5	+4.3	St. George	100	25	Bryce Canyon	5	3	1.48	+.23	Alta	6.10	Castle Dale	T
Virginia	55.9	+1.3	2 stations	94	23	2 stations	23	13	2.64	−.65	Capron	5.09	Riverton	.66
Washington	48.1	−.5	Wawawai	96	25	Bumping Lake	14	7	2.37	+.17	Kelly's Ranch	14.43	2 stations	.00
West Virginia	53.2	+1.4	Williamson	92	22	2 stations	16	[1]13	1.99	−1.52	Bluefield No. 2	4.88	Kearneysville	.44
Wisconsin	47.5	+3.8	El Dorado	86	1	do	9	10	.83	−1.66	Brule	2.70	High Falls	.14
Wyoming	47.7	+7.2	Basin	92	21	Lake Yellowstone	−3	10	.75	−.87	Clarkelen	1.93	Quaking Aspen Creek	.00
Alaska (March)	7.3	−6.2	View Cove	61	[1]29	Hot Springs	−52	13	2.28	+.44	Little Port Walter	17.86	Wainwright	T
Puerto Rico	74.8	+.1	Ponce	94	[1]7	Mameyes	50	27	3.77	−.23	Mona Island	9.89	Ponce	.46

[1] Other dates also.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS FOR APRIL 1946

District and station	Elevation of instruments: Barometer above sea level	Thermometer above ground	Anemometer above ground	Pressure: Station	Sea level	Departure from normal	Temperature of the air: Mean	Departure from normal	Maximum	Date	Mean maximum	Minimum	Date	Mean minimum	Greatest daily range	Total degree days	Mean temperature of the dew point	Mean relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	Days with 0.01 inch or more	Wind: Average hourly velocity	Prevailing direction	Maximum velocity: Miles per hour	Direction	Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month	Number of days with thunderstorms
NEW ENGLAND	*Ft.*	*Ft.*	*Ft.*	*Mb.*	*Mb.*	*Mb.*	°F.	°F.	°F.		°F	°F.		°F.	°F.		°F.	%	*In.*	*In.*	*In.*		*Mi.*								*0–10*	*In.*	*In.*	
							42.9	−0.4								69	3.02	−0.1													6.6			
Eastport	75	67	85	1,009.5	1,012.5	−1.0	37.6	−1.4	61	24	43	14	1	32	25	819	31	78	6.35	+3.5	2.21	14	12.0	n.	39	e.	26	7	6	17	7.0	27.9	.0	0
Greenville, Maine	1,070	6	41	972.9	1,012.9	-----	35.5	−1.6	68	23	45	6	1	26	44	886	28	----	4.20	+1.3	1.18	14	----	n.	----	----	----	2	10	18	----	14.3	.0	0
Portland, Maine [1]	103	5	43	1,009.1	1,012.9	−1.7	40.4	−2.6	68	23	50	13	1	31	39	735	32	74	2.71	−.7	.80	11	9.9	nw.	31	s.	18	5	11	14	6.6	4.3	.0	1
Concord [1]	289	5	45	1,002.7	1,013.2	−2.4	42.2	+.6	74	23	54	10	1	30	48	684	32	68	2.99	+.2	1.09	11	9.5	nw.	30	nw.	20	2	14	14	6.8	2.5	.0	2
Burlington [1]	403	5	51	998.3	1,013.2	−2.4	42.0	−1.3	81	23	52	14	1	32	44	689	32	70	2.31	+.2	.59	14	10.2	nw.	34	s.	18	1	12	17	7.5	3.9	.0	1
Boston [1]	124	33	62	1,009.1	1,013.5	−1.4	46.2	−.2	66	2	54	24	1	39	33	565	32	62	2.62	−.7	.92	10	12.9	nw.	36	ne.	26	6	11	13	6.8	1.5	.0	1
Block Island	26	11	46	1,013.9	1,014.9	−.3	44.8	+.8	63	23	51	31	1	38	27	606	36	75	2.38	−1.2	1.12	13	16.2	nw.	42	nw.	5	9	7	14	5.7	.4	.0	1
Providence [3]	159	46	60	1,008.1	1,014.2	−1.0	47.6	+1.0	72	2	57	26	1	38	37	525	31	62	2.25	−1.0	1.00	12	10.3	nw.	34	sw.	15	6	11	13	6.5	.1	.0	2
Hartford [1]	159	5	44	1,014.2	1,014.6	−1.0	46.6	−.1	79	23	57	25	8	36	----	549	34	66	2.58	−.8	1.22	13	10.5	nw.	34	nw.	3	6	9	15	6.4	.9	.0	2
New Haven [1]	107	5	39	1,010.8	1,014.9	−.7	46.2	+1.3	73	2	56	30	1	37	36	567	34	64	1.85	−1.4	.87	12	8.7	nw.	25	se.	2	10	7	13	5.9	.4	.0	2
MIDDLE ATLANTIC																																	
							52.5	+1.2								62	1.71	−1.3													6.0			
Albany [1]	97	26	40	1,010.5	1,013.9	−2.0	44.8	+.4	80	23	55	21	1	34	40	608	32	64	1.50	−.7	.42	11	11.5	w.	38	w.	5	4	10	16	7.0	.2	.0	2
Binghamton [2]	871	60	79	985.1	1,017.6	−1.0	45.0	−.3	84	23	56	23	8	34	44	596	32	69	1.25	−1.2	.37	13	7.7	w.	24	w.	2	3	14	13	6.7	1.5	.0	2
New York	314	415	454	1,003.4	1,014.9	−1.0	49.8	+.4	75	23	58	34	11	41	33	457	33	58	1.28	−2.0	.63	11	17.8	nw.	63	nw.	3	10	7	13	5.5	T	.0	1
Harrisburg [1]	374	30	49	1,002.0	1,015.9	−.7	51.7	+.8	86	23	63	30	11	40	45	404	36	58	.57	−2.1	.23	8	9.5	nw.	33	n.	5	6	10	14	6.0	.0	.0	0
Philadelphia [1]	114	5	57	1,011.9	1,016.3	.0	52.8	+.7	82	23	62	36	11	44	35	366	36	60	1.46	−1.6	.82	7	8.7	nw.	26	nw.	3	8	10	12	5.8	.0	.0	2
Reading	323	47	306	1,004.1	1,016.3	-----	51.8	+1.0	85	23	62	32	11	41	40	399	----	---	.66	−2.6	.33	10	12.8	nw.	49	sw.	15	7	10	13	6.2	.0	.0	1
Scranton	805	72	104	986.1	1,015.9	+.4	47.4	−.7	84	23	58	25	8	37	38	528	----	----	1.02	−1.8	.34	12	8.2	nw.	27	nw.	16	8	11	11	6.1	1.0	.0	1
Atlantic City	52	37	172	1,013.9	1,015.9	.0	50.6	+2.8	80	2	58	34	11	43	33	432	39	70	1.89	−1.1	.99	8	16.5	s.	39	s.	2	5	11	14	6.5	.0	.0	1
Trenton	190	89	107	1,008.5	1,015.6	-----	51.0	+1.2	81	23	61	33	11	41	36	423	34	58	1.16	−1.8	.65	9	10.8	nw.	27	nw.	3	9	9	12	5.9	.0	.0	1
Baltimore [2]	123	100	215	1,011.9	1,016.3	.0	55.6	+2.0	84	2	65	37	11	46	33	290	38	58	1.56	−1.8	.77	9	11.3	nw.	34	sw.	6	9	11	10	5.5	.0	.0	1
Washington [2]	112	56	100	1,012.5	1,016.6	.0	56.0	+2.7	90	23	67	34	11	45	39	285	38	56	1.88	−1.4	1.20	8	8.5	nw.	26	nw.	16	6	11	13	6.0	.0	.0	1
Cape Henry	18	8	54	1,015.6	1,016.3	-----	57.4	+2.8	86	20	65	40	13	49	33	246	44	66	2.58	−.7	1.66	7	12.7	se.	31	n.	16	12	6	12	5.3	.0	.0	4
Lynchburg [1]	686	4	50	991.9	1,016.6	.0	57.3	+1.7	89	23	69	34	28	45	41	256	40	62	2.36	−.6	1.14	8	9.1	sw.	29	sw.	15	5	12	13	5.9	.0	.0	3
Norfolk [2]	91	80	125	1,013.5	1,016.9	+.6	58.1	+1.3	88	23	67	40	12	49	36	230	44	66	3.42	+.2	1.90	9	10.3	ne.	25	sw.	15	11	5	14	5.9	.0	.0	3
Richmond	144	11	52	1,010.8	1,015.9	−.7	58.2	+1.6	90	23	69	36	28	47	----	----	41	61	3.07	−.4	1.53	9	8.6	sw.	30	sw.	15	11	7	12	5.2	.0	.0	2
SOUTH ATLANTIC																																	
							63.0	+1.7								70	3.59	+0.5													5.1			
Asheville	2,253	77	92	938.7	1,017.6	+.7	58.0	+4.1	87	2	70	31	13	46	38	228	42	66	3.09	+.1	1.17	13	8.2	nw.	30	nw.	5	7	8	15	6.4	T	.0	4
Charlotte [2]	779	63	86	989.5	1,018.0	+1.1	62.6	+2.8	99	3	74	38	13	51	34	141	46	68	3.65	+.3	1.52	11	7.6	sw.	23	sw.	15	7	7	16	6.2	.0	.0	2
Greensboro [1]	886	6	56	985.4	1,017.3	-----	59.0	+2.7	89	3	72	33	12	46	39	215	44	67	2.69	−.9	1.06	11	8.5	sw.	27	sw.	15	9	8	13	5.8	.0	.0	2
Hatteras	11	5	50	1,016.6	1,017.3	+1.0	57.5	−2.3	75	24	63	45	12	52	18	234	52	86	3.05	−.5	1.40	8	14.0	ne.	40	n.	12	14	5	11	5.1	.0	.0	1
Raleigh [1]	376	5	69	1,003.4	1,016.9	.0	60.0	+.6	91	3	72	36	18	48	37	197	46	68	6.32	+2.8	2.00	12	7.6	sw.	28	w.	2	12	8	10	5.1	.0	.0	4
Wilmington	72	73	107	1,014.9	1,017.3	+.4	62.0	.0	89	3	72	40	13	52	30	139	52	76	3.52	+.9	2.30	7	10.3	sw.	41	nw.	26	12	9	9	4.8	.0	.0	3
Charleston [2]	48	11	92	1,016.3	1,018.0	+1.1	66.4	+1.9	92	3	75	47	13	58	28	63	54	77	2.80	+.3	1.67	7	10.1	sw.	30	ne.	21	16	7	7	4.1	.0	.0	2
Columbia, S. C. [2]	347	70	91	1,005.1	1,017.6	+.7	64.8	+1.5	91	3	76	39	13	53	36	98	49	64	3.71	+.8	1.76	8	8.7	sw.	26	ne.	16	13	7	10	4.9	.0	.0	3
Greenville, S. C. [1]	1,040	18	36	980.4	1,017.3	-----	61.7	+3.1	88	20	73	37	13	50	35	149	46	66	3.52	−.2	1.50	8	9.2	sw.	38	ne.	16	10	10	10	5.3	.0	.0	2
Augusta [2]	182	62	77	1,011.2	1,017.6	+.7	65.8	+1.6	91	3	78	39	13	54	35	77	49	64	6.10	+3.0	2.48	9	6.2	s.	19	s.	16	12	11	7	4.5	.0	.0	5
Savannah [4]	65	73	152	1,015.9	1,018.3	+1.4	67.8	+3.5	90	3	79	45	28	57	35	41	54	70	1.96	−.6	1.07	7	10.5	sw.	36	sw.	25	11	14	5	4.6	.0	.0	4
Jacksonville [2]	43	86	110	1,017.3	1,018.6	+1.3	69.8	+1.1	89	10	79	51	18	60	28	20	58	74	2.70	+.3	1.27	5	9.0	w.	23	w.	26	16	11	3	4.1	.0	.0	4
FLORIDA PENINSULA																																	
							74.4	+0.9								76	0.78	−1.4													4.0			
Key West [2]	21	10	64	1,016.6	1,017.3	+.7	77.5	+1.8	85	25	83	66	6	72	16	0	68	77	1.37	+.1	1.10	6	9.5	e.	26	w.	26	15	11	4	4.0	.0	.0	2
Miami [2]	25	242	249	1,016.9	1,017.6	+.7	73.2	−.7	86	12	78	60	27	68	20	0	64	75	.60	−2.8	.47	5	14.5	e.	35	w.	17	13	15	2	4.0	.0	.0	1
Tampa [1]	35	6	43	1,017.3	1,018.3	+.3	72.6	+1.7	87	23	82	55	13	63	27	0	61	75	.37	−1.6	.37	1	10.2	nw.	40	sw.	25	15	10	5	4.1	.0	.0	0
EAST GULF																																	
							67.8	+3.2								74	2.15	−2.1													4.8			
Atlanta [1]	1,173	33	72	976.3	1,018.0	+1.1	64.1	+3.0	87	23	75	38	13	53	32	102	50	67	2.98	−.7	1.26	9	10.4	nw.	40	nw.	10	8	13	9	5.3	.0	.0	6
Macon [2]	370	79	87	1,004.4	1,017.6	+.7	65.9	+2.0	87	3	78	39	13	54	36	75	51	66	2.23	−.9	.78	10	6.2	s.	23	nw.	26	10	12	8	4.8	.0	.0	7
Apalachicola	35	11	51	1,017.3	1,018.3	-----	69.7	+2.6	83	9	77	50	13	62	21	10	61	80	.46	−2.3	.27	2	9.0	w.	24	e.	22	13	11	6	4.3	.0	.0	2
Pensacola	56	54	79	1,016.6	1,019.0	+2.4	69.8	+3.1	85	9	77	51	13	63	22	13	60	78	.52	−3.5	.43	3	8.3	w.	21	se.	30	15	9	6	4.3	.0	.0	0
Anniston	741	9	----	----	----	----	65.5	+4.3	86	23	78	36	13	53	36	73	----	----	3.36	−1.0	1.36	8	----	nw.	----	----	----	16	5	9	----	.0	.0	5
Birmingham [1]	700	5	62	993.2	1,018.0	+1.4	65.0	+3.3	87	7	78	34	13	52	37	83	52	70	1.54	−3.3	.80	7	7.9	sw.	26	nw.	26	8	12	10	5.4	.0	.0	4
Mobile [2]	57	86	161	1,016.6	1,018.6	+2.0	69.8	+3.5	87	10	79	46	13	61	27	15	59	80	1.06	−3.6	.66	4	7.2	s.	24	n.	26	14	8	8	4.5	.0	.0	2
Montgomery [2]	218	92	105	1,010.2	1,018.0	+1.1	68.6	+3.3	87	9	79	44	13	58	30	36	55	74	2.68	−1.6	1.28	6	6.9	sw.	21	n.	10	17	6	7	4.3	.0	.0	5
Meridian [2]	375	67	92	1,004.7	1,018.3	+1.7	67.6	+3.6	86	8	79	39	13	56	33	44	55	74	1.68	−3.1	.64	6	6.5	sw.	26	w.	11	12	11	7	4.7	.0	.0	2
Vicksburg [2]	247	82	102	1,008.5	1,017.6	+1.7	69.1	+3.5	86	1	79	47	12	60	28	27	57	78	3.97	−1.2	1.35	7	8.6	s.	32	ne.	11	10	9	11	5.3	.0	.0	4
New Orleans [4]	53	50	84	1,015.9	1,018.0	+2.1	71.4	+3.6	88	10	80	56	19	63	26	1	62	76	3.16	−2.1	1.25	5	6.5	se.	17	nw.	25	7	16	7	5.5	.0	.0	4
WEST GULF																																	
							70.2	+3.2								74	4.50	+0.7													6.1			
Shreveport [1]	249	5	64	1,007.8	1,016.6	+1.7	69.5	+4.7	88	8	80	45	18	59	30	30	58	73	5.32	+.7	2.26	8	9.7	s.	31	se.	16	6	10	14	6.3	.0	.0	7
Fort Smith	463	57	82	999.3	1,015.6	+1.0	65.3	+3.5	92	1	77	39	17	54	38	75	53	70	6.77	+2.8	2.10	8	7.5	ne.	25	sw.	1	11	5	14	5.8	.0	.0	3
Little Rock [1]	357	26	58	1,004.1	1,016.9	+1.7	65.6	+3.5	89	1	76	40	13	55	36	75	53	69	4.81	−.4	2.53	7	8.9	sw.	34	n.	15	10	10	10	5.7	.0	.0	8
Austin [1]	605	10	41	994.6	1,015.9	-----	69.8	+2.0	88	7	80	46	18	60	31	13	58	71	7.92	+3.6	3.84	8	10.1	s.	32	nw.	30	7	8	15	6.5	.0	.0	10
Brownsville [1]	57	5	54	1,012.2	1,014.2	-----	75.2	+1.5	88	8	84	56	18	67	26	0	67	83	5.85	+4.1	2.54	5	12.8	se.	40	se.	30	4	13	13	6.1	.0	.0	7
Corpus Christi [1]	20	4	33	1,014.9	1,015.6	+1.4	73.3	+4.3	87	10	81	55	18	65	26	1	64	80	3.97	-----	2.22	4	12.6	se.	31	n.	30	2	16	12	6.4	.0	.0	4
Dallas [1]	512	5	45	997.3	1,019.0	-----	69.6	+4.5	94	6	81	46	12	58	33	22	56	69	2.96	−1.3	1.29	4	12.1	s.	33	n.	29	7	12	11	6.0	.0	.0	4
Fort Worth [1]	679	40	56	991.5	1,015.9	+2.0	68.4	+4.3	94	6	79	44	12	57	28	28	56	70	2.49	−1.5	1.45	6	12.6	s.	45	nw.	15	11	5	14	5.8	.0	.0	3
Galveston [2]	54	106	114	1,015.2	1,016.9	+2.0	71.8	+3.1	83	26	76	59	17	68	20	1	64	82	2.17	−.9	1.21	4	11.4	s.	27	s.	30	8	13	9	5.6	.0	.0	3
Houston [2]	138	157	190	1,011.9	1,016.9	-----	71.7	+2.4	89	8	80	52	18	63	25	3	60	76	3.15	−.4	2.23	4	11.1	se.	40	nw.	30	3	16	11	6.3	.0	.0	4
Palestine	510	64	72	998.6	1,016.6	+2.0	69.2	+3.2	86	1	79	47	18	60	28	29	56	69	4.33	−.1	1.53	7	7.8	s.	21	s.	3	6	10	14	6.2	.0	.0	3
Port Arthur [2]	34	59	134	1,015.6	1,016.9	-----	71.6	+3.1	84	10	78	52	18	65	25	4	61	80	2.75	−.2	1.64	5	13.1	s.	47	se.	16	5	15	10	6.0	.0	.0	3
San Antonio [1]	693	8	51	991.2	1,015.9	+2.4	71.1	+2.0	93	7	83	45	17	60	34	8	58	71	5.54	+2.4	2.77	8	9.3	se.	35	w.	30	6	7	17	7.0	.0	.0	7
OHIO VALLEY AND TENNESSEE																																	
							56.6	+2.7								67	2.35	−1.4													6.2			
Chattanooga [1]	762	6	66	990.2	1,017.6	+.7	62.4	+4.8	87	20	75	34	13	50	41	119	51	74	3.19	−1.7	1.00	10	7.6	s.	31	nw	26	6	10	14	6.0	.0	.0	3
Knoxville [1]	995	27	53	982.1	1,018.0	.0	61.6	+4.3	88	21	73	33	13	50	36	145	48	66	4.10	.0	1.45	13	8.2	sw	38	sw	8	9	11	10	5.7	.0	.0	6
Memphis [4]	399	5	86	1,003.1	1,017.3	+1.4	65.7	+3.9	87	7	77	38	13	55	34	79	54	73	4.90	+.1	1.46	10	8.6	s.	25	nw.	11	11	8	11	5.5	.0	.0	6
Nashville [1]	546	2	72	997.6	1,017.6	+1.3	62.6	+3.6	87	2	74	35	13	51	37	132	48	66	3.45	−.7	1.32	10	9.1	s.	29	nw.	11	9	11	10	5.4	.0	.0	3
Lexington [1]	989	4	28	981.4	1,018.0	+1.4	56.9	+2.6	86	23	68	32	17	46	36	275	42	66	.79	−2.7	.35	7	----	sw.	----	----	----	10	9	11	5.7	.0	.0	2
Louisville [1]	525	106	120	998.3	1,017.3	+1.0	58.0	+3.2	86	2	69	31	13	47	38	244	43	63	2.39	−1.5	.77	9	9.5	n.	34	nw.	26	8	8	14	6.1	.0	.0	4

See footnotes at end of table.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS FOR APRIL 1946—Continued

District and station	Elevation of instruments: Barometer above sea level	Thermometer above ground	Anemometer above ground	Pressure: Station	Sea level	Departure from normal	Temperature of the air: Mean	Departure from normal	Maximum	Date	Mean maximum	Minimum	Date	Mean minimum	Greatest daily range	Total degree days	Mean temperature of the dew point	Mean relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	Days with 0.01 inch or more	Wind: Average hourly velocity	Prevailing direction	Maximum velocity: Miles per hour	Direction	Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month	Number of days with thunderstorms
OHIO VALLEY AND TENNESSEE—Con.	*Ft.*	*Ft.*	*Ft.*	*Mb.*	*Mb.*	*Mb.*	°*F.*	°*F.*	°*F.*		°*F.*	°*F.*		°*F.*	°*F.*		°*F.*	%	*In.*	*In.*	*In.*		*Mi.*								*0–10*	*In.*	*In.*	
Evansville [1]	431	11	40	1,001.7	1,017.3	+1.4	59.0	+4.1	84	22	70	32	13	48	38	218	46	68	2.16	−1.7	.51	10	9.3	s.	34	nw.	26	7	11	12	5.8	.0	.0	5
Indianapolis [1]	823	5	54	987.5	1,017.3	+1.4	53.0	+2.2	84	22	65	30	12	41	39	372	39	64	1.07	------	.49	6	10.9	sw.	40	sw.	1	7	9	14	6.4	T	.0	0
Terre Haute [2]	575	68	149	997.0	1,018.3	------	56.4	+2.7	85	3	67	31	12	46	33	282	42	65	1.87	−1.8	1.11	8	10.4	n.	34	nw.	4	7	10	13	6.1	T	.0	4
Cincinnati [2]	627	11	51	994.9	1,017.6	+1.3	56.8	+4.4	87	22	68	34	27	46	37	275	43	70	2.32	−.8	.70	8	7.5	e.	30	nw.	4	5	9	16	6.6	T	.0	4
Columbus [2]	822	90	110	987.8	1,018.0	+1.4	52.2	+1.0	84	22	62	32	11	42	39	390	39	68	1.72	−1.2	.32	12	10.0	n.	46	sw.	4	5	10	15	6.6	.2	.0	2
Dayton [1]	1,003	6	55	981.4	1,018.0	------	51.4	+.9	982	22	63	29	12	40	38	408	39	67	1.35	−1.8	.67	9	11.7	nw	45	w.	4	5	10	15	6.7	.8	.0	2
Elkins [1]	1,947	4	45	947.9	1,017.6	+.7	49.0	+1.6	80	22	62	24	11	36	49	485	38	71	1.93	−1.7	.56	14	8.1	nw.	35	w.	4	5	8	17	6.8	2.3	.0	2
Parkersburg	637	77	84	994.2	1,017.6	+.7	54.3	+.9	84	22	66	30	13	43	42	335	37	57	1.63	−1.6	.71	12	7.0	nw.	30	nw.	4	4	9	17	6.8	.0	.0	3
Pittsburgh [1]	842	39	54	986.5	1,017.3	+.7	50.0	+.8	81	22	61	28	11	39	39	451	36	64	1.15	−1.8	.54	9	10.9	nw.	44	w.	4	4	12	14	6.7	T	.0	3
LOWER LAKES							46.2	+1.3																							6.0			
Buffalo [1]	768	34	96	987.5	1,015.9	−.4	44.4	+.6	73	23	55	26	11	34	37	620	32	64	1.27	−1.3	.52	8	14.2	sw.	44	w.	4	9	9	12	5.7	T	.0	1
Canton	448	10	61	997.3	1,013.5	------	42.2	+.3	82	23	52	18	1	32	33	688	30	64	2.04	−.1	.57	15	8.8	w.	30	w.	18	2	12	16	7.3	1.6	.0	1
Oswego	335	71	85	1,001.7	1,014.2	−2.1	43.1	+.5	82	23	51	27	1	36	37	657	32	68	1.10	−1.2	.42	13	10.5	w.	28	n.	26	9	10	11	5.7	.7	.0	1
Rochester [1]	523	5	69	996.3	1,015.9	−.4	44.4	+.9	82	23	55	25	11	34	43	618	32	64	1.41	−.9	.64	9	12.7	nw.	50	w.	4	8	13	9	5.9	.5	.0	1
Syracuse [1]	596	5	57	993.6	1,015.6	−.7	44.4	+1.4	84	23	56	24	8	33	43	618	32	66	2.14	−.3	.83	12	11.9	w.	36	w.	6	2	12	16	7.0	2.4	.0	2
Erie [2]	714	57	81	990.9	1,016.9	+.3	46.8	+1.7	78	22	58	29	11	38	33	549	36	72	1.31	−1.4	.93	9	9.0	w.	26	sw.	2	8	13	9	5.3	T	.0	0
Cleveland [1]	762	27	54	989.2	1,017.3	+.7	48.4	+2.2	83	22	60	26	17	37	40	497	34	59	1.18	−1.3	.51	7	11.7	n.	44	w	14	6	13	11	6.0	T	.0	2
Sandusky	629	5	67	994.2	1,017.6	+1.0	49.8	+2.6	81	22	59	30	28	40	37	465	------	------	.75	−1.8	.30	10	10.1	e.	28	w.	4	9	12	9	5.2	.0	.0	0
Toledo [1]	628	5	47	994.2	1,017.6	+1.3	47.8	+1.6	82	22	61	23	28	35	41	513	34	62	.84	−1.8	.33	10	12.5	sw.	36	sw.	4	6	11	13	6.1	.0	.0	0
Fort Wayne [1]	857	5	33	986.1	1,017.6	------	49.0	+.3	83	22	62	27	28	36	44	481	36	66	.72	−2.4	.33	13	9.6	nw.	35	w.	4	6	8	16	6.5	.0	.0	0
Detroit [1]	730	5	78	990.5	1,017.3	+.7	47.8	+2.2	81	22	58	26	11	37	40	517	35	62	.74	−1.7	.37	7	11.1	nw.	42	nw.	2	8	10	12	5.8	.0	.0	1
UPPER LAKES							44.6	+3.3																							5.6			
Alpena	609	5	89	993.9	1,016.6	.0	41.3	+2.7	68	2	50	24	10	33	32	712	30	70	1.08	−1.2	.51	10	13.3	nw.	45	nw.	2	7	15	8	5.5	3.1	.0	3
Escanaba	612	51	72	994.2	1,017.6	+1.0	41.3	+3.4	67	23	50	24	7	33	28	714	30	70	.39	−1.8	.17	7	12.1	s.	42	nw.	15	8	14	8	5.8	T	.0	0
Grand Rapids [2]	707	70	244	991.2	1,017.3	+.7	49.0	+2.0	82	22	60	26	10	38	42	487	32	62	1.03	−1.7	.56	10	12.5	sw.	37	sw.	4	12	11	7	5.0	T	.0	1
Lansing [2]	878	5	90	984.8	1,017.3	------	46.8	+1.2	81	22	58	25	10	35	42	545	33	60	.82	−1.8	.32	9	9.9	sw.	30	nw.	2	10	8	12	5.6	.0	.0	3
Marquette	734	44	73	989.2	1,016.9	+.3	41.9	+4.1	83	22	50	23	11	33	40	695	30	64	.65	−1.8	.37	9	9.8	n.	34	w.	22	7	8	15	6.2	2.6	.0	3
Sault Sainte Marie [1]	614	11	52	993.6	1,016.6	+.3	37.7	+1.2	77	22	47	17	10	28	35	817	28	74	1.34	−.8	.33	10	13.2	nw.	38	nw.	2	5	14	11	6.1	6.1	.0	3
Chicago [1]	673	5	36	992.9	1,018.0	+2.1	51.1	+4.2	85	22	62	28	12	40	42	421	37	63	1.28	−1.3	.64	8	10.7	ne.	33	w.	4	9	10	11	5.8	.0	.0	1
Green Bay	617	5	32	994.2	1,016.9	+.6	46.8	+3.6	82	22	58	25	10	35	39	549	32	62	.67	−2.0	.34	7	10.1	n.	36	sw.	2	7	15	8	5.4	.0	.0	1
Milwaukee [1]	681	33	66	992.2	1,017.6	+2.0	47.2	+5.0	82	22	58	28	12	37	43	540	34	64	.94	−1.7	.30	9	14.1	sw.	49	sw.	4	10	10	10	5.3	.0	.0	1
Duluth [2]	1,133	5	47	974.6	1,016.9	+.6	42.8	+5.8	74	17	53	23	27	33	43	668	29	68	1.08	−1.0	.45	9	12.2	ne.	38	w.	17	9	12	9	5.3	3.3	.0	2
NORTH DAKOTA							48.9	+8.4																							5.4			
Fargo [1]	940	6	47	981.4	1,015.9	+.3	47.4	+6.8	82	30	60	23	6	35	42	534	32	64	1.10	−1.1	.73	6	14.2	n.	40	w.	2	10	16	4	4.7	7.4	.0	1
Bismarck [1]	1,677	5	43	955.0	1,015.2	+.3	50.6	+10.2	84	30	65	26	9	36	46	433	32	55	1.04	−.5	.60	6	12.8	nw.	43	se.	30	7	15	8	5.7	2.7	.0	1
Devils Lake	1,478	11	44	961.7	1,015.9	+.3	47.1	+8.3	80	30	59	22	9	35	38	537	30	57	.23	−1.3	.09	5	10.3	se.	33	nw.	17	12	12	6	5.0	.6	.0	1
Grand Forks [1]	832	4	41	985.4	1,016.6	------	46.0	------	84	30	59	22	9	33	44	572	32	66	.28	------	.19	3	----	s.	----	----	----	9	12	9	----	3.2	.0	1
Williston	1,878	42	50	946.8	1,014.2	+.4	50.4	+8.4	83	30	64	18	8	37	43	439	28	48	.35	−.8	.24	2	8.9	se.	35	w.	1	5	12	13	6.1	T	.0	2
UPPER MISSISSIPPI							54.9	+4.8																							5.7			
Minneapolis-St. Paul [1]	919	43	74	982.1	1,015.9	+.3	51.1	+4.7	83	30	62	26	9	40	31	422	34	58	.66	−1.6	.31	6	12.1	nw.	43	w.	1	7	15	8	5.7	.1	.0	0
Springfield, Minn.	1,025	4	42	979.0	1,016.6	------	52.0	------	81	29	64	25	6	40	39	394	34	59	.54	------	.29	5	----	nw.	----	----	----	7	15	8	----	T	.0	0
La Crosse [1]	714	5	29	990.5	1,016.6	+1.4	50.4	+4.8	81	21	63	23	16	38	35	441	34	61	.80	−1.6	.37	5	10.4	se.	38	w.	4	11	9	10	5.3	T	.0	3
Madison [2]	974	70	78	981.7	1,017.3	+1.7	50.4	+5.0	80	1	61	29	10	40	41	446	34	61	.90	−1.9	.51	9	9.1	sw.	27	w.	4	9	12	9	5.6	.6	.0	1
Charles City	1,015	10	51	980.7	1,018.0	+2.8	52.2	+5.8	83	21	65	29	9	39	42	386	------	------	.56	−2.0	.20	5	7.4	se.	27	sw.	3	12	10	8	4.7	T	.0	3
Moline [1]	606	6	50	995.3	1,018.0	+2.8	53.5	+4.7	84	21	66	27	12	42	39	357	38	58	.68	−2.0	.26	10	11.1	e.	41	w.	3	6	10	14	6.2	T	.0	1
Des Moines [2]	860	5	99	986.1	1,017.3	+2.4	56.0	+5.9	83	19	67	31	12	45	33	282	40	65	1.32	−1.6	.56	7	10.7	n.	37	sw.	3	11	6	13	5.6	.8	.0	4
Dubuque	699	60	79	991.9	1,017.3	+2.1	54.0	+5.4	83	19	65	31	5	43	33	339	36	58	.85	−2.0	.54	7	6.6	s.	23	nw.	4	9	10	11	5.6	.1	.0	3
Burlington [1]	702	4	36	991.9	1,017.6	+2.4	45.5	+3.1	83	1	66	28	12	43	34	332	41	66	1.58	−1.6	.57	12	11.3	nw.	40	w.	3	5	9	16	6.2	5.2	.0	4
Cairo	357	5	99	1,004.4	1,017.3	+1.7	63.5	+4.4	86	22	74	38	12	53	35	114	------	------	4.61	+.9	1.46	13	9.6	sw.	31	sw.	1	10	8	12	5.5	.0	.0	6
Peoria [1]	609	6	26	995.6	1,017.6	+2.0	54.2	+4.3	83	21	65	28	12	43	33	343	38	60	1.55	−1.8	.77	8	11.0	e.	34	w.	3	7	9	14	6.3	T	.0	3
Springfield, Ill. [2]	636	5	191	994.2	1,017.3	+2.1	57.4	+4.7	87	1	68	32	12	47	34	257	42	67	2.74	−1.0	.62	8	11.8	e.	33	nw.	4	8	4	18	6.5	1.0	.0	2
St. Louis [2]	568	35	303	996.6	1,016.9	+1.7	61.1	+5.0	91	1	71	35	12	52	----	178	----	64	2.85	−1.0	1.69	8	11.6	ne.	36	sw.	1	9	8	13	----	.0	.0	1
MISSOURI VALLEY							57.6	+6.3																							5.5			
Columbia, Mo. [2]	784	6	66	988.5	1,016.9	+1.7	59.5	+4.7	88	1	71	31	12	48	34	206	44	66	3.00	−.8	.81	10	7.5	e.	28	sw.	1	16	7	7	4.3	.0	.0	3
Kansas City [1]	963	39	76	981.4	1,016.3	+1.7	60.5	+5.7	86	1	70	33	12	51	30	183	44	62	4.57	+1.0	1.97	8	10.5	ne.	37	s.	2	11	4	15	5.9	.0	.0	3
St. Joseph [2]	967	11	49	981.4	1,016.3	------	58.8	+5.3	83	20	68	33	12	49	33	213	45	68	1.79	−1.4	.54	8	8.5	e.	37	w.	3	15	9	6	4.1	.0	.0	3
Springfield, Mo. [1]	1,324	5	67	969.2	1,016.6	+1.7	60.6	+5.4	92	1	72	31	12	50	36	176	46	68	4.00	+.1	1.46	10	12.4	s.	42	sw.	1	8	4	18	6.3	.0	.0	4
Topeka	987	65	87	980.7	1,016.3	------	59.8	+5.1	86	19	70	34	12	49	32	187	45	64	3.19	+.4	1.18	8	8.8	s.	29	w.	3	10	3	17	6.3	.0	.0	2
Lincoln [2]	1,189	11	81	973.2	1,015.9	+2.0	58.8	+7.3	89	19	71	32	9	47	38	217	40	60	.80	−2.0	.45	3	9.5	n.	43	nw.	3	12	6	12	5.6	.0	.0	0
Omaha [1]	1,105	5	68	976.3	1,016.3	+2.1	57.7	+6.7	89	19	70	32	12	46	41	242	40	60	.58	−1.9	.48	4	12.0	n.	47	w.	3	11	6	13	5.8	.0	.0	2
Valentine	2,598	46	54	923.8	1,015.2	+1.3	54.2	+8.5	85	20	68	30	15	41	39	325	33	53	1.58	−.3	.46	9	9.8	n.	29	nw.	3	13	9	8	5.0	.5	.0	4
Sioux City [1]	1,138	5	40	974.9	1,015.9	+1.7	54.2	+7.0	86	19	68	27	9	41	39	339	38	62	1.05	−1.6	.47	6	11.7	n.	54	w.	3	10	8	12	5.7	.0	.0	6
Huron [1]	1,301	5	41	968.5	1,015.6	+1.0	52.4	+7.3	83	21	67	26	9	38	43	386	35	58	.70	−1.5	.49	5	13.6	se.	36	nw.	1	8	13	9	5.7	T	.0	1
NORTHERN SLOPE							50.3	+6.3																							6.4			
Billings [1]	3,570	16	40	890.6	1,014.2	------	52.8	+6.8	88	26	67	28	10	39	39	367	32	48	.28	------	.19	4	10.9	sw.	40	nw.	30	5	11	14	6.4	T	.0	1
Havre	2,507	11	67	925.2	1,014.2	+.7	50.6	+6.9	88	26	65	24	5	36	46	434	28	47	.43	−.6	.25	6	10.6	sw.	42	sw.	6	3	13	14	6.7	T	.0	0
Helena [1]	4,124	5	43	873.4	1,015.9	+1.0	48.0	+4.5	85	25	63	17	7	33	47	506	28	50	.33	−.8	.24	5	10.1	w.	37	w.	26	2	13	15	7.1	T	.0	1
Missoula [1]	3,263	4	32	903.5	1,018.6	------	46.3	+2.4	85	25	61	20	7	32	48	558	30	60	.33	−.6	.16	8	6.9	nw.	38	nw.	29	3	8	19	7.4	T	.0	0
Kalispell	2,973	48	56	912.3	1,016.3	+1.7	45.4	+1.8	79	25	56	25	7	35	39	584	31	60	.51	−.3	.25	7	6.2	sw.	29	sw.	26	2	12	16	7.3	T	.0	1
Miles City [1]	2,371	5	78	930.2	1,014.2	−.4	53.3	------	86	26	68	23	8	39	46	356	32	52	.63	------	.24	8	----	nw.	----	----	----	7	8	15	6.3	.0	.0	1
Rapid City [1]	3,259	5	63	901.5	1,015.2	+1.0	52.3	+8.2	82	18	67	26	8	38	44	380	32	51	2.31	+.9	1.23	6	15.7	nw.	52	nw.	27	6	14	10	5.8	6.8	.0	2
Cheyenne [1]	6,094	5	40	813.1	1,014.2	+1.3	49.0	+8.1	78	26	63	27	4	35	40	483	30	54	.35	−1.6	.13	7	11.1	nw.	38	nw.	3	3	19	8	6.0	1.6	.0	4
Lander	5,352	60	68	834.7	1,013.9	.0	49.8	+7.4	81	25	65	21	4	34	42	459	26	44	.47	−1.6	.37	3	6.7	sw.	30	sw.	5	9	16	5	5.1	T	.0	0
Sheridan [1]	3,790	5	38	883.8	1,014.9	------	52.4	+9.1	87	26	66	28	8	39	43	378	30	48	1.10	−.8	.53	4	9.5	nw.	44	nw.	21	5	13	12	6.1	T	.0	1
North Platte [2]	2,821	11	51	916.4	1,014.9	+1.7	56.7	+8.1	86	19	70	31	11	43	38	263	36	56	.63	−1.4	.48	4	8.1	se.	28	nw.	3	3	14	13	6.5	.3	.0	2

See footnotes at end of table.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS FOR APRIL 1946—Continued

District and station	Elevation of instruments: Barometer above sea level	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station	Pressure: Sea level	Pressure: Departure from normal	Temperature of the air: Mean	Temperature of the air: Departure from normal	Temperature of the air: Maximum	Temperature of the air: Date	Temperature of the air: Mean maximum	Temperature of the air: Minimum	Temperature of the air: Date	Temperature of the air: Mean minimum	Temperature of the air: Greatest daily range	Total degree days	Mean temperature of the dew point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: Days with 0.01 inch or more	Wind: Average hourly velocity	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month	Number of days with thunderstorms
MIDDLE SLOPE	*Ft.*	*Ft.*	*Ft.*	*Mb.*	*Mb.*	*Mb.*	°F.	°F.	°F.		°F.	°F.		°F.	°F.		°F.	%	*In.*	*In.*	*In.*		*Mi.*								*0–10*	*In.*	*In.*	
							60.6	+6.5										58	1.87	−0.7											5.5			
Denver [2]	5,292	106	113	837.5	1,013.2	+.7	56.4	+9.3	79	13	69	33	8	44	34	265	30	46	1.33	−.7	.59	6	7.3	s.	27	w.	3	8	17	5	4.8	T	.0	2
Pueblo [1]	4,690	5	36	856.4	1,013.9	+2.0	57.6	+8.2	84	26	75	25	11	41	49	223	32	50	2.82	+1.5	1.06	5	9.7	nw.	49	sw.	2	8	14	8	5.2	.0	.0	5
Concordia	1,392	50	58	966.1	1,015.9	+2.4	59.0	+5.5	88	19	71	35	9	47	35	206	41	58	.94	−1.4	.44	5	8.2	s.	33	w.	3	11	7	12	5.5	.0	.0	2
Dodge City [1]	2,509	5	58	927.2	1,014.6	+2.1	60.1	+6.5	88	19	75	31	11	46	38	171	42	58	.36	−1.6	.31	4	15.8	ne.	40	sw.	13	11	3	16	5.8	.0	.0	5
Wichita [1]	1,358	6	64	967.2	1,015.6	+2.1	60.8	+4.4	87	1	71	36	12	50	31	156	45	62	1.87	−1.0	1.36	5	14.4	ne.	41	se.	2	9	2	19	6.3	.0	.0	5
Oklahoma City [1]	1,214	10	47	972.2	1,015.6	+2.4	65.3	+5.5	92	1	76	39	12	54	33	81	49	63	2.07	−1.2	1.22	7	9.5	s.	22	s.	5	10	7	13	5.4	.0	.0	2
Tulsa [1]	674	10	60	991.2	1,015.2	-----	64.7	+5.8	94	1	76	37	12	54	34	85	50	66	3.72	−.5	2.31	7	12.4	s.	33	sw.	5	9	7	14	5.8	.0	.0	5
SOUTHERN SLOPE							67.8	+5.8										52	1.31	−0.5											5.6			
Abilene [1]	1,738	4	59	953.6	1,013.9	+1.4	69.4	+6.4	98	1	82	38	17	56	39	27	49	57	1.03	−1.7	.41	7	15.7	se.	45	nw.	15	9	8	13	5.8	.0	.0	5
Amarillo [1]	3,676	5	42	889.3	1,013.3	+1.8	63.0	+9.2	92	1	79	34	16	47	43	104	42	52	.55	−1.3	.35	3	14.9	s.	42	w.	5	11	7	12	5.3	.0	.0	4
Del Rio	960	63	71	980.4	1,013.2	+1.0	74.1	+3.5	95	9	84	54	18	64	27	0	57	60	3.33	+1.5	2.47	5	10.0	e.	24	se.	10	8	8	14	6.5	.0	.0	5
Roswell	3,566	75	85	893.0	1,013.5	+2.7	64.9	+4.3	89	2	81	37	16	49	44	59	33	38	.34	−.6	.29	4	8.7	s.	32	sw.	2	13	5	12	4.9	.0	.0	4
SOUTHERN PLATEAU							66.0	+6.0										38	0.71	+0.2											4.3			
El Paso [1]	3,778	39	85	886.2	1,011.9	+1.7	67.8	+5.5	87	2	81	42	4	54	43	13	36	36	.36	+.1	.36	1	10.6	se.	42	w.	2	9	8	13	5.6	.0	.0	2
Albuquerque [1]	5,314	5	45	838.5	1,012.5	-----	61.3	+7.3	83	21	76	33	3	47	40	125	30	38	.26	−.3	.18	5	10.1	sw.	56	s.	2	14	8	8	4.5	.0	.0	3
Flagstaff	6,907	36	51	791.4	1,016.6	-----	48.4	+5.1	77	17	64	12	3	32	45	498	26	52	3.45	+2.1	1.76	11	----	w.	----	----	----	15	7	8	4.3	7.4	.0	3
Phoenix [2]	1,107	39	87	972.9	1,011.5	.0	73.6	+6.6	100	23	89	43	3	58	45	12	38	36	.04	−.4	.04	1	6.7	e.	31	e.	24	17	6	7	4.0	.0	.0	1
Tucson [1]	2,555	5	39	924.8	1,011.9	-----	70.6	+6.2	95	23	86	39	3	55	47	22	33	30	.14	−.2	.07	3	----	nw.	----	----	----	14	8	8	4.5	.0	.0	2
Yuma	142	9	54	1,006.4	1,011.5	−.7	74.6	+5.1	103	23	91	46	3	58	44	9	38	36	T	−.1	T	0	5.5	sw.	24	se.	24	21	6	3	2.7	.0	.0	0
MIDDLE PLATEAU							51.2	+4.6										50	0.71	−0.2											4.8			
Reno [1]	4,527	20	52	863.2	1,016.9	+2.0	49.2	+3.1	87	24	69	20	2	30	56	476	30	54	.05	−.4	.05	2	7.1	w.	40	s.	29	13	12	5	4.3	T	.0	0
Winnemucca	4,339	5	56	868.6	1,016.6	+2.0	51.2	+4.5	88	24	67	24	1	36	50	413	28	49	.44	−.4	.18	5	7.8	sw.	34	w.	29	12	8	10	4.9	.7	.0	1
Modena	5,473	19	46	833.7	1,014.2	+2.3	50.0	+4.0	80	17	67	24	3	33	49	452	----	----	.77	−.1	.59	5	9.1	w.	35	s.	26	18	9	3	3.4	T	.0	2
Salt Lake City [1]	4,227	32	58	867.6	1,015.2	+2.0	54.6	+6.7	84	25	67	31	4	42	40	318	34	53	1.59	−.1	.71	10	8.9	se.	31	n.	30	9	10	11	5.4	.9	.0	3
Grand Junction [2]	4,602	60	68	860.5	1,015.6	+3.7	57.6	------	87	21	71	31	4	44	42	330	32	46	.81	------	.25	8	7.3	se.	28	se.	26	7	12	11	6.0	.0	.0	6
NORTHERN PLATEAU							50.8	+1.9										58	0.53	−0.6											6.5			
Baker [2]	3,471	36	54	896.7	1,018.0	+2.1	47.2	+2.0	85	25	61	25	7	33	44	539	31	64	.48	−.6	.18	8	6.3	se.	21	sw.	7	5	12	13	6.4	T	.0	2
Boise [1]	2,739	5	49	920.8	1,016.9	+1.7	51.8	+2.7	92	25	66	29	30	38	38	401	34	56	.35	−.8	.17	5	9.3	se.	42	nw.	29	7	14	9	5.8	T	.0	3
Pocatello [1]	4,478	5	31	863.5	1,016.6	+2.7	50.6	+5.7	86	25	65	26	1	36	50	431	29	50	.48	−1.0	.25	4	10.2	sw.	38	sw.	29	4	14	12	6.6	T	.0	3
Spokane [1]	1,929	27	42	948.5	1,018.0	+2.4	48.0	−.4	89	25	60	28	5	36	46	512	35	64	.98	−.2	.44	10	7.6	sw.	32	sw.	26	2	7	21	7.8	T	.0	0
Walla Walla	991	57	65	982.1	1,018.0	+1.7	54.1	+1.0	86	25	64	33	7	44	33	332	----	----	.84	−.7	.45	6	5.5	s.	21	sw.	25	8	16	6	5.3	.0	.0	1
Yakima	1,076	58	67	978.7	1,018.0	-----	52.8	+.3	85	25	65	30	7	41	34	367	----	----	.03	−.4	.02	2	6.3	nw.	24	s.	10	6	8	16	6.9	.0	.0	0
NORTH PACIFIC COAST							50.3	+0.5										74	2.72	−0.3											7.3			
North Head	211	5	55	1,012.5	1,020.3	+2.7	47.3	−.2	62	17	52	38	4	43	16	532	43	84	4.97	+.8	1.85	18	15.5	s.	56	s.	19	2	6	22	8.0	.0	.0	1
Seattle [2]	125	90	321	1,015.2	1,020.0	+3.1	51.0	−.1	72	24	58	37	7	44	23	421	41	73	1.86	−.5	.65	13	10.0	s.	34	w.	19	5	11	14	6.6	.0	.0	0
Tacoma	194	172	201	1,012.5	1,019.6	+2.7	49.8	+1.1	69	24	57	35	7	42	23	459	----	----	1.94	−.8	.63	14	8.8	sw.	32	s.	19	5	10	15	6.7	T	.0	0
Tatoosh Island	86	9	61	1,015.9	1,019.3	+3.7	46.2	+.1	58	17	50	38	8	42	15	567	42	83	7.73	+2.1	1.49	21	12.8	s.	42	s.	28	0	5	25	8.8	.0	.0	0
Medford [1]	1,329	29	58	971.2	1,019.0	-----	52.8	+.7	88	24	67	30	30	38	46	366	38	64	1.07	−.3	.79	5	----	n.	----	----	--	6	11	13	6.1	.0	.0	1
Portland, Oreg. [2]	154	68	106	1,014.6	1,020.3	+2.3	52.8	+1.0	79	24	61	35	7	44	28	368	42	74	.98	−1.9	.30	11	6.2	nw.	22	sw.	19	2	11	17	7.6	.0	.0	0
Roseburg	510	45	76	1,001.7	1,020.7	+2.4	52.2	+1.2	79	24	64	34	7	41	37	386	40	67	.49	−1.8	.19	8	4.1	n.	22	sw.	19	2	12	16	7.0	.0	.0	0
MIDDLE PACIFIC COAST							56.9	+1.4										69	0.26	−1.8											4.7			
Eureka	60	72	88	1,020.0	1,022.4	+2.8	50.0	+.1	60	25	55	37	30	45	19	448	44	79	.42	−2.9	.17	7	7.8	n.	28	n.	26	4	7	19	7.3	.0	.0	0
Red Bluff [1]	353	5	26	1,004.1	1,016.9	-----	61.9	+2.9	96	24	76	40	2	48	41	138	40	52	.51	−1.2	.44	4	7.6	nw.	25	nw.	29	14	10	6	4.2	.0	.0	2
Sacramento	66	92	115	1,015.2	1,017.6	+.7	60.4	+2.3	94	24	74	41	1	47	38	166	44	64	.06	−1.4	.11	1	7.1	sw.	21	sw.	28	21	7	2	2.7	.0	.0	1
San Francisco [2]	155	112	132	1,013.2	1,018.6	+1.0	55.2	+.2	82	23	61	47	2	49	28	293	46	82	.05	−1.6	.41	2	9.5	w.	31	w.	28	12	12	6	4.5	.0	.0	0
SOUTH PACIFIC COAST							62.9	+3.4										65	0.33	−0.6											4.8			
Fresno [1]	327	5	34	1,004.4	1,016.6	+1.0	64.4	+4.2	97	24	80	39	3	48	45	100	44	54	.03	−.9	.03	1	7.3	nw.	23	nw.	29	20	7	3	2.9	.0	.0	0
Los Angeles	338	223	250	1,004.1	1,016.3	+.7	62.0	+2.6	88	11	72	46	1	52	34	118	49	70	.44	−.6	.28	3	5.8	w.	17	sw.	8	7	20	3	5.0	.0	.0	1
San Diego [1]	87	20	55	1,013.2	1,016.3	+.7	62.4	+3.4	85	11	70	46	3	55	31	91	52	72	.52	−.2	.40	4	6.4	nw.	20	w.	2	5	11	14	6.4	.0	.0	0
PANAMA CANAL (March, 1946)																																		
Balboa Heights	118	6	92	-------	[3] 1,010.8	+.3	82.0	+.4	93	31	91	70	2	73	22	0	70	[3] 72	1.09	+.4	.96	3	10.7	n.	24	n.	8	7	17	7	5.6	.0	.0	1
Cristobal	27	47	97	-------	[3] 1,011.9	.0	80.4	−.8	88	15	84	74	20	77	9	0	71	[3] 76	.80	−.7	.20	16	14.7	n.	25	n.	19	0	18	13	7.2	.0	.0	0
ALASKA																																		
Anchorage [1]	132	6	44	999.5	1,004.7	-----	32.8	−2.6	52	29	42	5	8	24	31	969	23	64	.13	−.3	.10	4	5.8	n.	19	se.	29	6	6	18	6.8	1.9	.0	0
Fairbanks [1]	455	5	63	987.5	1,005.1	-----	27.0	−2.3	55	30	40	−17	3	14	51	1,140	18	65	.24	.0	.11	8	5.5	n.	17	sw.	2	7	11	12	6.0	3.5	.0	0
Juneau [1]	80	6	30	1,007.1	1,010.2	-----	39.2	------	54	24	44	28	8	34	21	775	34	82	3.11	------	.62	25	10.8	se.	30	se.	11	0	1	29	8.8	2.4	.0	0
Nome	22	25	56	1,003.4	1,004.1	-----	16.4	−3.3	43	22	26	−25	7	7	35	1,454	14	87	.48	−.2	.37	8	12.8	e.	49	e.	8	9	6	15	6.5	5.7	30.5	0
Barrow	29	5	27	1,015.2	1,015.9	-----	{ — / 10.0 }	−9.7	6	8	−3	−30	8	−17	25	2,248	−10	98	.07	.0	.05	3	----	ne.	23	------	1	20	7	3	2.9	1.5	13.7	0
Bethel	28	5	31	999.7	1,001.0	-----	22.2	−5.0	42	27	31	−19	7	13	36	1,269	20	88	.93	+.4	.24	15	----	------	31	------	17	1	6	23	8.3	10.6	11.2	0
Cordova	45	5	32	1,003.7	1,005.8	-----	34.6	------	48	25	42	11	2	28	25	908	30	82	5.54	------	1.02	22	----	------	----	------	----	3	5	22	8.0	10.0	.1	0
Gambell	32	5	32	1,009.5	1,010.8	-----	−1.6	------	23	5	3	−12	16	−6	32	------	−2	94	.17	------	------	4	15.0	n.	41	nne.	29	2	12	16	----	1.7	17.6	----
Ketchikan	75	69	90	1,011.9	1,012.5	-----	41.0	−1.6	52	18	46	30	18	36	18	718	36	79	11.72	+.7	2.06	27	8.2	se.	27	se.	11	0	2	28	9.0	T	.0	0
Kotzebue	20	5	31	1,006.4	1,007.1	-----	8.6	−5.2	39	19	19	−25	6	−2	31	1,689	7	86	.16	−.1	----	4	10.0	ne.	36	e.	17	15	7	8	4.4	2.2	16.3	0
McGrath	341	5	31	990.2	1,003.1	-----	23.7	−1.9	52	22	37	−22	2	10	43	1,240	21	79	.56	+.1	.24	7	----	e.	21	e.	8	4	9	17	7.0	8.6	13.1	0
Northway	1,718	5	32	941.8	1,005.4	-----	26.1	------	50	29	40	−14	1	12	42	1,166	19	70	.03	------	.02	2	----	e.	18	------	4	4	12	14	6.7	.3	2.5	0
HAWAII																																		
Honolulu	38	86	100	1,017.3	1,018.6	-----	73.1	+.1	80	13	77	66	20	69	10	0	----	----	1.30	−.8	.56	16	11.6	e.	26	ne.	5	2	17	11	6.4	.0	.0	0

[1] Data are airport records.

[2] Barometric data (adjusted to old city elevation) and hygrometric data from airport; otherwise city office records.

[3] Observations taken hourly.

[4] Pressure (adjusted to old city elevation), temperature, and hygrometric data from airport; otherwise city office records.

[5] Temperature and precipitation from city records; other data from airport.

NOTE.—Except as indicated by notes [1], [2], [4], and [5] data in table are city office records.

SEVERE LOCAL STORMS FOR APRIL 1946

[The table herewith contains such data as has been received concerning severe local storms that occurred during the month. A revised list of tornadoes will appear in the UNITED STATES METEOROLOGICAL YEARBOOK]

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
	Apr. 1946						
Michigan, northern lower portion.	2	1–4:53 p. m.				Straight-line wind	Wide trail of destruction reported. Trees blown over, blocking streets; wires down; minor damage to many homes.
North Dakota, southeastern portion of State.	3					Snowfall	20.6 inches recorded in Fullerton; 19 inches in Lisbon; 14.5 for Oakes, and 12.5 in Valley City.
Ottawa, Kans., vicinity of	5	4:30 p. m.	100	0	$3,000	Tornado	Large barn and several small farm buildings demolished; path 6 miles long.
Madison, Marshall, Etowah, and Calhoun Counties, Ala.	7	4:30–8 p. m.	[1] 20		2,000,000	Hail, wind, and severe thunderstorm.	Storm moved from Tennessee into Alabama. Electric wires broken by falling uprooted trees; much livestock killed by hail. This thunderstorm moved into Madison County from Pulaski, Tenn., and followed a straight path toward the south-southeast. It began to dissipate after passing over Anniston, Ala. The last hail reported was a light fall at Rock Mills, Ala.
Corydon, Ky.	8	P. m.			100,000	Wind	Property damaged.
Fulton, Ky., and vicinity	8	do				Thunderstorm and hail.	Windows broken in many buildings; damage not estimated.
Ada to Allen, Okla., and vicinities.	9	9:55–10:10 a. m.	[1] 1		50,000	Hail and rain	Small grains and early crops beaten down; roof damaged and many windows in buildings and automobiles broken; 2 persons injured.
Meade and Clark Counties, Kans.	14	6 p. m.-midnight.	3–8		50,000	Heavy hail	Loss mostly in wheat; some roofs damaged.
Joplin, Minn., and vicinity	15	2:30–3 p. m.				Straight-line wind	Buildings, plate glass windows, power and transmission lines and poles, signs, and trees damaged; 1 person slightly injured.
Euless, Tex., and vicinity	15	5 p. m.		0	11,400	2 tornadoes	First tornado came from a west-southwesterly direction about ½ mile south of Euless. Front of buildings blown in; large trees twisted off. Path about 33 yards wide and a mile long; damage $700. The second tornado, coming from the west, struck about the same time, 5 p. m., over a path 33 yards wide and 880 yards long. Roof of Euless Lumber Co. blown off and a house blown over; damage about $700. In connection with the same storm, there was considerable damage to planes owned by the Civil Aeronautics Association and the American Airlines, amounting to over $10,000.
Bollinger and Cape Girardeau Counties, Mo.	15–16	Midnight–2 a. m.			6,060	Straight-line wind	Trees uprooted; property damaged; amount estimated chiefly for Marble Hill, Mo.
Pittsburg, Okla.	16	4 p. m.			10,000	Wind and rain	Home destroyed; buildings damaged.
Timber Lake, S. Dak., and vicinity	21	10 p. m.	[1] 4	0	150,000–200,000	Tornadic wind	Property damaged; path 6 miles long.
Pittsburgh, Pa.	23	3:30–4 p. m.			500	High wind and rain	Damage to small buildings, trees, and shrubbery.
Wilmington, N. C.	26	2:45–3:40 p. m.			2,500	Thunderstorm	Maximum wind velocity of 41 miles per hour; property damaged.
Harmon County, Okla.	28	4:30–5:15 p. m.	[1] 6		9,000	Hail, rain, and wind	No details.
Oglesby, Okla.	28	6:30–9 p. m.	[1] 5		1,500	Rain and hail	Livestock killed by lightning.
Oregon and Nordaway Counties, Mo.	29	5 p. m.				Wind, hail, and heavy rain.	Barns, small outbuildings, windmills, and trees severely damaged by wind. Hailstones in vicinity east of Graham fell to depth of about an inch.
Stanly County, N. C., western portion.	29	P. m.	[1] 1			Heavy hail	Property damaged; loss in small grains, fruits, and vegetables; path 5 miles long. Damage in thousands of dollars.

[1] Miles instead of yards.

SOLAR RADIATION AND SUNSPOT DATA FOR APRIL 1946

[Solar Radiation Investigations Section, I. F. HAND, in charge]

SOLAR RADIATION OBSERVATIONS

TABLE 1.—*Solar radiation intensities during April 1946*

[Gram calories per minute per square centimeter of normal surface]

Date	Sun's zenith distance										
	7:30 a. m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°	1:30 p. m.
	75th mer. time	Air mass									75th mer. time
		A. M.				*1.0	P. M.				
	e.	5.0	4.0	3.0	2.0		2.0	3.0	4.0	5.0	e.
MADISON, WIS.											
	mb.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*mb.*
Apr. 2	7.2	0.66	0.79	0.96	1.08	1.23	------	------	------	------	12.7
Apr. 5	5.3	.81	.86	1.15	1.30	------	------	------	------	------	6.9
Apr. 6	5.3	.81	.98	1.11	1.30	1.46	------	------	------	------	4.8
Apr. 9	4.4	.84	1.06	1.16	1.28	1.42	------	------	------	------	5.6
Apr. 12	4.4	------	.65	.79	1.10	1.24	------	------	------	------	4.4
Apr. 15	6.9	.65	.90	.92	1.22	------	------	------	------	------	5.8
Apr. 16	4.4	.77	.92	1.04	1.19	1.36	------	------	------	------	3.7
Apr. 17	4.6	------	------	.66	.77	1.20	------	------	------	------	7.8
Apr. 18	6.1	.64	.76	.90	1.08	1.40	------	------	------	------	5.1
Apr. 20	5.6	.64	.75	.95	1.16	1.42	------	------	------	------	6.4
Apr. 24	6.6	.62	.75	.83	1.06	1.33	------	------	------	------	4.6
Apr. 25	7.2	.68	.83	.94	1.11	1.36	------	------	------	------	7.2
Apr. 26	5.6	.75	.83	.99	1.18	1.44	------	------	------	------	5.3
Apr. 27	3.8	.73	.84	.95	1.16	1.38	------	------	------	------	2.5
Apr. 29	8.4	------	------	------	------	1.32	------	------	------	------	7.4
Apr. 30	8.1	------	.43	.58	.79	1.20	------	------	------	------	9.8
Means	------	.72	.81	.93	1.12	1.34	------	------	------	------	------
Departures	------	+.01	−.05	−.07	−.06	−.07	------	------	------	------	------
LINCOLN, NEBR.											
Apr. 4	6.1	------	------	1.03	1.20	1.42	1.23	1.06	0.92	0.79	6.4
Apr. 6	6.9	------	0.79	.94	1.11	1.33	------	------	------	------	11.0
Apr. 12	6.6	------	------	------	1.09	1.41	------	------	------	------	8.7
Apr. 16	5.1	------	------	.66	1.01	1.36	1.08	.85	.72	.62	7.4
Apr. 17	6.4	------	------	------	1.09	1.34	1.08	.90	.77	------	8.7
Apr. 26	6.4	------	------	------	1.11	1.42	------	------	------	------	4.6
Apr. 29	7.2	------	------	------	------	1.30	.88	.67	------	------	10.6
Means	------	------	(.79)	.88	1.10	1.37	1.07	.87	.80	(.70)	------
Departures	------	------	−.04	−.09	−.08	−.08	−.10	−.09	−.02	.00	------

SOLAR RADIATION OBSERVATIONS—Continued

TABLE 1.—*Solar radiation intensities during April 1946*—Continued

[Gram calories per minute per square centimeter of normal surface]

Date	Sun's zenith distance										
	7:30 a. m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°	1:30 p. m.
	75th mer. time	Air mass									75th mer. time
		A. M.				*1.0	P. M.				
	e.	5.0	4.0	3.0	2.0		2.0	3.0	4.0	5.0	e.
BLUE HILL, MASS.											
	mb.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*mb.*
Apr. 6	4.8	0.91	1.01	1.09	1.21	------	------	------	1.00	------	6.5
Apr. 7	3.7	.94	1.04	1.10	1.32	------	------	------	------	------	3.6
Apr. 8	3.6	.99	1.09	1.20	1.28	------	------	------	------	------	3.8
Apr. 10	4.7	------	------	1.07	1.23	1.53	------	------	------	------	4.6
Apr. 11	3.7	------	------	1.14	------	------	------	------	------	------	3.7
Apr. 12	4.5	.85	.91	------	------	------	------	------	------	------	4.2
Apr. 14	5.6	------	------	------	1.09	------	1.14	0.91	.80	0.70	4.8
Apr. 16	5.2	.84	.95	1.12	1.27	1.42	------	1.03	.92	.79	4.7
Apr. 17	3.1	.92	1.00	1.12	1.21	1.46	1.22	.94	.79	.66	2.7
Apr. 18	6.1	.71	.81	.96	1.07	1.40	------	------	------	------	5.8
Apr. 19	5.1	.76	.88	1.00	1.17	1.47	1.20	1.05	.90	.80	3.8
Apr. 20	9.3	------	------	------	------	1.50	------	------	------	------	5.7
Apr. 21	4.7	.88	1.02	1.10	1.30	1.48	------	1.09	------	------	4.3
Apr. 22	4.7	------	.69	.87	------	------	1.17	.91	.87	.77	4.5
Apr. 23	5.4	------	------	.93	1.11	1.39	------	.76	.64	.52	4.2
Apr. 24	8.7	------	------	------	------	------	------	.88	.62	.44	10.5
Apr. 28	5.9	.63	.71	.83	------	------	------	1.06	.93	------	4.8
Apr. 30	9.0	------	------	------	------	------	.94	.61	.47	.39	7.4
Means	------	.84	.92	1.04	1.21	1.46	1.13	.92	.79	.63	------
Departures	------	+.05	+.03	+.01	+.02	+.07	.00	−.03	−.02	−.05	------
BOSTON, MASS.											
Apr. 24	9.1	------	------	------	------	------	0.71	------	------	------	9.8
Mean	------	------	------	------	------	------	(.71)	------	------	------	------

*Extrapolated.

TABLE 2.—*Daily totals and weekly means of solar radiation (direct + diffuse) received on a horizontal surface*

[Gram calories per square centimeter]

Date	Washington, D. C.	Madison, Wis.	Lincoln, Nebr.	East Lansing, Mich.	New York, N. Y.	Fresno, Calif.	Fairbanks, Alaska	Columbia, Mo.	Boston, Mass.	Nashville, Tenn.	Twin Falls, Idaho	La Jolla, Calif.	Riverside, Calif.	Blue Hill, Mass.	Newport, R. I.	State College, Pa.	Put-in-Bay, Ohio	East Wareham, Mass.	Davis, Calif.	Boulder, Colo.	Tooele, Utah	New Orleans, La.	Toronto, Canada	Ithaca, N. Y.
1946	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*
Apr. 2	361	476	480	343	379	609	416	454	337	511	298	557	482	359	397	354	258	360	681	473	398	585	168	432
Apr. 3	521	187	528	105	396	538	359	441	137	530	321	579	623	175	350	417	190	196	665	657	477	581	146	131
Apr. 4	201	145	571	40	59	500	251	619	144	457	442	164	293	174	228	471	144	250	557	610	473	572	197	308
Apr. 5	509	319	223	475	160	385	331	293	231	561	246	587	625	244	388	199	448	291	670	595	444	590	265	89
Apr. 6	312	587	488	321	169	232	339	480	364	257	437	294	405	287	278	240	377	278	540	406	179	549	512	351
Apr. 7	610	312	172	477	602	448	369	297	525	371	543	453	427	545	586	622	503	382	647	180	257	492	543	574
Apr. 8	38	383	230	92	221	615	440	315	388	100	352	553	550	438	441	70	134	484	433	75	268	507	73	101
Means	365	344	385	293	284	504	358	414	304	398	377	455	486	317	381	339	294	320	585	428	356	534	272	284
Departures	−11	−30	−7	−41	−64	+5	+22	−10	−60	−10	−55	−44	+23	−71	−30	−46	−72	−72	+28	0	−108	+125	.....	+2
Apr. 9	547	569	193	282	369	620	429	472	95	420	332	558	633	135	175	378	317	160	710	608	341	549	219	88
Apr. 10	555	454	106	439	603	611	430	504	469	545	443	556	641	500	567	550	423	567	728	535	547	523	541	218
Apr. 11	543	503	151	438	607	575	328	80	315	380	538	566	638	352	530	556	357	385	637	567	537	389	479	643
Apr. 12	194	572	570	536	291	554	421	649	472	587	342	484	408	469	382	472	632	396	687	638	513	610	499	316
Apr. 13	586	402	472	112	268	622	346	518	212	578	334	472	633	233	316	482	169	341	731	409	497	606	488	607
Apr. 14	607	499	121	424	565	610	395	249	538	532	588	476	612	543	607	560	503	561	715	72	283	582	473	634
Apr. 15	533	633	423	401	176	594	310	261	182	229	558	234	541	226	256	218	225	228	724	227	542	492	252	36
Means	509	519	291	376	411	598	380	390	326	467	448	478	587	351	405	459	375	377	705	436	437	536	422	363
Departures	+108	+114	−123	+10	+53	+49	+12	−11	−51	+46	−1	−41	+127	−21	−14	+55	−24	−36	+105	+21	−64	+103	.....	+54
Apr. 16	476	603	594	570	620	589	274	704	522	95	553	104	466	620	637	634	607	639	727	638	545	178	602	494
Apr. 17	614	561	590	514	540	599	402	687	510	620	548	262	505	638	602	632	595	629	718	491	533	324	521	611
Apr. 18	592	625	472	536	427	607	473	574	479	562	506	455	493	592	608	308	519	633	701	501	492	533	462	223
Apr. 19	660	372	523	276	606	576	383	665	529	591	432	463	477	622	659	630	439	638	765	435	358	.....	501	548
Apr. 20	598	630	579	589	554	660	304	652	385	564	574	570	598	442	501	656	691	422	768	426	550	500	367	163
Apr. 21	673	562	522	561	630	658	440	562	583	578	606	603	628	662	670	648	652	666	759	532	528	487	582	560
Apr. 22	639	529	369	360	433	632	471	363	242	502	619	467	646	334	439	609	474	308	768	676	585	394	449	619
Means	607	555	521	487	544	617	393	601	464	502	548	418	545	559	588	588	568	562	744	528	512	403	498	460
Departures	+191	+148	+79	+111	+154	+35	+15	+200	+92	+79	+67	−97	+37	+168	+165	+169	+144	+142	+125	+48	−50	−6	.....	+151
Apr. 23	498	645	613	232	449	643	466	182	554	468	606	282	593	599	599	381	234	658	764	580	596	184	205	368
Apr. 24	280	623	618	518	330	636	434	564	181	196	624	455	618	261	292	510	652	239	757	668	593	224	575	609
Apr. 25	76	547	606	362	176	630	512	702	377	380	592	.....	607	438	440	328	330	499	775	675	545	447	243	517
Apr. 26	239	564	660	195	95	642	504	742	28	413	448	.....	502	62	93	102	695	88	792	463	414	645	470	37
Apr. 27	323	659	369	580	149	655	529	619	61	652	648	.....	558	79	116	284	598	111	806	393	562	610	500	189
Apr. 28	664	272	514	279	679	660	522	370	393	428	633	.....	455	428	505	695	484	338	759	576	476	493	572	680
Apr. 29	361	600	623	552	68	670	501	629	101	566	371	.....	520	157	195	400	638	270	759	579	548	518	386	495
Means	349	559	572	388	278	648	495	544	242	440	560	.....	550	289	320	386	519	315	773	562	533	446	422	412
Departures	−95	+121	+146	+42	−166	+79	+124	+130	−106	+12	+56	.....	+76	−139	−129	−49	+105	−113	+146	+32	−79	+25	.....	+16

ACCUMULATED DEPARTURES ON APRIL 29, 1946

	+644	+1,092	−548	+420	−1,477	+3,101	.....	.....	+819	+1,652	+399	.....	+5,453	+791	−1,085	+1,400	.....	.....	+6,916	+2,247	−4,110	.....	.....	.....

CORRECTED DATA FOR EAST WAREHAM, MASS., JANUARY 1946

Date	Mean	Departure
Jan. 1-7	161	+8
Jan. 8-14	158	−3
Jan. 15-21	163	+2
Jan. 22-28	182	+1

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR APRIL 1946

By LUCY T. DAY

[Equatorial Division, U. S. Naval Observatory]

[Communicated by the Superintendent, U. S. Naval Observatory.] All measurements and spot counts were made at the Naval Observatory from plates taken at the observatories indicated. Difference in longitude is measured from the central meridian, positive toward the west. Latitude is positive toward the north. Areas are corrected for foreshortening and expressed in millionths of Sun's hemisphere. For each day, under Mount Wilson group number, longitude, latitude, area of spot or group, and spot count, are included respectively: number of groups, assumed longitude of center of the disk, assumed latitude of center of the disk, total areas of spot and groups, and total spot count.

Date	Eastern standard time	Mount Wilson group No.	Heliographic: Difference in longitude	Heliographic: Longitude	Heliographic: Latitude	Heliographic: Distance from center of disk	Area of spot or group	Spot count	Plate quality	Observatory
1946	*h m*		°	°	°	°				
Apr. 1	10 12	8008	−88	206	−29	88	194	1	F	U. S. Naval.
		8007	−48	246	−24	51	194	1		
		8006	−37	257	+32	52	388	16		
		8007	−33	261	−29	38	12	2		
		8006	−31	263	+27	47	242	2		
		8005	−31	263	−28	37	121	8		
		8004	−30	264	−18	32	61	1		
		8006	−27	267	+27	43	73	9		
		8003	−22	272	−27	30	97	1		
		8002	+58	352	+25	64	73	5		
		8002	+75	9	+21	78	533	1		
		(7)		(294)	(−7)		1,988	47		
2	11 49	8008	−80	200	−29	80	97	3	G	Do.
		8008	−75	205	−30	75	242	2		
		8011	−46	234	−36	53	6	1		
		8007	−35	245	−24	38	170	1		
		8010	−32	248	−14	33	6	2		
		8005	−25	255	−30	34	6	1		
		8006	−23	257	+32	43	291	25		
		8006	−20	260	+27	38	291	2		
		8005	−19	261	−31	31	12	2		
		8005	−18	262	−27	27	97	3		
		8004	−17	263	−18	22	73	1		
		8006	−16	264	+27	38	73	8		
		8003	−9	271	−25	21	145	1		
		8009	+37	317	+25	50	6	2		
		(9)		(280)	(−6)		1,515	54		
3	10 51	8012	−85	182	−37	86	194	1	F	Do.
		8008	−69	198	−28	69	24	1		
		8008	−62	205	−30	64	267	1		
		8011	−34	233	−36	43	6	1		
		8007	−21	246	−24	26	145	1		
		8006	−9	258	+30	38	242	13		
		(*)	−7	260	−31	26	6	1		
		8005	−6	261	−29	24	73	1		
		8006	−6	261	+27	35	267	3		
		8006	−5	262	+26	33	97	4		
		8004	−3	264	−18	13	61	1		
		8003	+4	271	−26	21	97	1		
		8003	+5	272	−25	19	6	1		
		8009	+51	318	+24	60	12	1		
		(10)		(267)	(−6)		1,497	31		
4	12 31	8012	−71	182	−37	72	194	1	F	Do.
		8008	−55	198	−28	58	48	1		
		8008	−49	204	−30	52	242	1		
		8007	−8	245	−24	20	170	1		
		8006	+4	257	+31	37	218	11		
		8006	+8	261	+27	36	242	2		
		8005	+9	262	−27	24	61	1		
		8006	+11	264	+27	35	73	5		
		8004	+12	265	−18	17	61	1		
		8003	+13	266	−26	22	6	1		
		8003	+19	272	−26	27	97	2		
		8009	+64	317	+24	71	6	1		
		(8)		(253)	(−6)		1,418	28		
5	10 36	8012	−59	182	−37	63	145	1	F	Do.
		8008	−42	199	−28	46	24	1		
		8008	−38	203	−30	43	218	1		
		8014	−23	218	−18	25	61	2		
		8013	−9	232	−36	32	48	2		
		8007	+3	244	−24	18	145	1		
		8005	+11	252	−28	25	6	1		
		8006	+16	257	+30	39	218	7		
		8006	+21	262	+26	38	291	1		
		8005	+21	262	−27	29	61	1		
		8004	+23	264	−18	25	48	1		
		8006	+24	265	+26	40	48	2		
		8003	+31	272	−26	36	48	1		
		(9)		(241)	(−6)		1,361	22		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR APRIL 1946—Continued

Date	Eastern standard time	Mount Wilson group No.	Heliographic: Difference in longitude	Heliographic: Longitude	Heliographic: Latitude	Heliographic: Distance from center of disk	Area of spot or group	Spot count	Plate quality	Observatory
1946	*h m*		°	°	°	°				
Apr. 6	10 35	8012	−47	181	−37	55	170	1	G	U. S.Naval.
		8008	−25	203	−30	33	218	1		
		8014	−12	216	−19	17	6	1		
		8014	−7	221	−18	14	6	1		
		8013	+4	232	−36	30	48	2		
		8007	+17	245	−25	25	170	1		
		8005	+25	253	−27	32	6	1		
		8006	+28	256	+30	45	242	18		
		8006	+32	260	+26	45	291	1		
		8006	+35	263	+27	49	6	1		
		8005	+35	263	−27	40	73	1		
		8004	+37	265	−18	37	36	1		
		(8)		(228)	(−6)		1,272	30		
7	11 54	8015	−82	132	−35	82	145	1	G	Do.
		8012	−34	180	−37	45	194	1		
		8008	−12	202	−30	27	242	1		
		8013	+17	231	−34	33	6	1		
		8007	+30	244	−24	34	170	1		
		8006	+41	255	+31	56	121	7		
		8006	+46	260	+27	58	291	1		
		8005	+47	261	−27	50	48	1		
		8004	+50	264	−18	51	12	1		
		(8)		(214)	(−6)		1,229	15		
8	10 51	8015	−79	122	−36	80	145	1	F	Mt. Wilson.
		8016	−70	131	−17	70	121	1		
		8015	−70	131	−35	70	291	7		
		8012	−21	180	−37	37	145	1		
		8008	+2	203	−29	23	242	1		
		8007	+42	243	−24	43	97	2		
		8006	+55	256	+30	67	48	2		
		8006	+60	261	+25	69	194	1		
		8005	+60	261	−27	62	121	1		
		8004	+63	264	−19	64	73	1		
		(8)		(201)	(−6)		1,477	18		
9	10 37	8015	−63	125	−35	68	339	7	G	U. S. Naval.
		8015	−60	128	−32	63	73	8		
		8016	−58	130	−17	59	121	1		
		8015	−57	131	−34	61	388	1		
		8012	−9	179	−37	33	194	1		
		8008	+14	202	−30	27	218	1		
		8007	+56	244	−24	58	97	2		
		8005	+62	250	−27	64	12	3		
		8006	+68	256	+31	76	97	1		
		8006	+69	257	+27	76	291	1		
		8006	+70	258	+29	78	97	1		
		(7)		(188)	(−6)		1,927	27		
10	11 12	8015	−51	124	−35	56	388	2	G	Do.
		8015	−46	129	−32	50	97	4		
		8016	−44	131	−16	46	121	1		
		8015	−42	133	−34	48	339	1		
		8012	+3	178	−37	30	194	1		
		8017	+13	188	−16	17	24	2		
		8008	+27	202	−30	35	194	1		
		8007	+70	245	−24	70	48	1		
		(6)		(175)	(−6)		1,405	13		
11	11 16	8020	−79	82	−9	79	12	1	VG	Do.
		(*)	−60	101	−15	60	12	2		
		8015	−39	122	−35	46	388	1		
		8015	−31	130	−33	40	6	1		
		8016	−30	131	−16	32	121	1		
		8019	−30	131	−10	30	12	1		
		8015	−29	132	−34	38	436	2		
		8012	+17	178	−37	36	194	1		
		8008	+40	201	−30	45	194	1		
		8018	+70	231	−19	70	12	1		
		(8)		(161)	(−6)		1,387	12		
12	12 45	8020	−66	81	−10	66	6	2	G	Do.
		(*)	−46	101	−14	47	6	1		
		8015	−27	120	−37	40	388	1		
		8015	−25	122	−37	40	24	2		
		8015	−17	130	−36	35	436	1		
		8016	−17	130	−16	20	73	1		
		(*)	+13	160	−16	17	12	1		
		8012	+30	177	−38	42	145	1		
		8008	+49	196	−30	52	61	2		
		8008	+52	199	−30	56	194	1		
		(7)		(147)	(−6)		1,345	13		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR APRIL 1946—Continued

Date	Eastern standard time	Mount Wilson group No.	Heliographic: Difference in longitude	Heliographic: Longitude	Heliographic: Latitude	Heliographic: Distance from center of disk	Area of spot or group	Spot count	Plate quality	Observatory
1946	h m		°	°	°	°				
Apr. 13	10 36	8015	−14	121	−36	33	388	1	G	U. S. Naval.
		8015	−11	124	−35	31	12	2		
		8019	−6	129	−12	9	24	3		
		8015	−4	131	−34	29	436	1		
		8016	−4	131	−17	12	97	2		
		8021	+23	158	−17	25	24	2		
		8021	+26	161	−15	27	12	1		
		8012	+40	175	−38	49	145	1		
		8008	+60	195	−31	63	48	2		
		8008	+65	200	−30	67	194	1		
		(6)		(135)	(−6)		1,380	16		
14	14 18	8015	0	120	−37	31	388	1	G	Do.
		8015	+5	125	−36	30	97	6		
		8015	+10	130	−35	31	339	1		
		8016	+11	131	−17	17	61	1		
		8021	+40	160	−16	41	6	1		
		8012	+55	175	−38	61	145	1		
		8008	+79	199	−30	79	170	1		
		(5)		(120)	(−6)		1,206	12		
15	10 55	8022	−83	26	−22	83	145	1	G	Do.
		8015	+12	121	−37	33	388	1		
		8015	+18	127	−37	37	97	9		
		8015	+21	130	−34	35	339	1		
		8016	+23	132	−17	25	48	1		
		8012	+68	177	−38	69	145	1		
		(4)		(109)	(−6)		1,162	14		
16	11 4	8022	−72	23	−21	72	48	1	G	Do.
		8022	−69	26	−21	69	145	1		
		8015	+24	119	−37	39	485	1		
		8015	+27	122	−37	40	61	1		
		8015	+31	126	−35	41	48	1		
		8015	+33	128	−34	43	388	1		
		8016	+36	131	−17	37	24	1		
		8012	+79	174	−38	80	145	1		
		(4)		(95)	(−6)		1,344	8		
17	10 55	8023	−85	358	+24	85	242	1	F	Do.
		8022	−60	22	−21	61	145	9		
		8022	−55	27	−21	57	97	2		
		8015	+38	120	−37	48	533	2		
		8015	+44	126	−35	51	12	1		
		8015	+47	129	−34	53	388	1		
		8016	+49	131	−18	51	12	1		
		(4)		(82)	(−5)		1,429	17		
18	11 20	8023	−70	339	+24	75	242	1	G	Do.
		8022	−47	22	−21	47	121	14		
		8022	−42	27	−21	43	61	2		
		8025	−40	29	−24	43	12	3		
		8024	−11	58	−19	18	12	1		
		8015	+50	119	−37	57	533	1		
		8015	+59	128	−33	61	6	1		
		8015	+61	130	−34	63	388	1		
		8016	+62	131	−17	62	6	1		
		(6)		(69)	(−5)		1,381	25		
19	10 58	(*)	−68	348	+30	72	12	1	G	Do.
		8023	−57	359	+24	62	267	1		
		8022	−37	19	−21	40	73	8		
		8022	−31	25	−21	34	97	10		
		8025	−27	29	−24	32	24	2		
		8024	+3	59	−17	12	48	9		
		8015	+63	119	−37	67	533	4		
		8015	+72	128	−34	73	388	1		
		(6)		(56)	(−5)		1,442	36		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR APRIL 1946—Continued

Date	Eastern standard time	Mount Wilson group No.	Heliographic: Difference in longitude	Heliographic: Longitude	Heliographic: Latitude	Heliographic: Distance from center of disk	Area of spot or group	Spot count	Plate quality	Observatory
1946	h m		°	°	°	°				
Apr. 20	10 8	8026	−80	323	+33	83	388	1	G	U. S. Naval.
		8026	−72	331	+33	78	194	2		
		8026	−67	336	+35	76	145	1		
		8026	−66	337	+33	73	97	1		
		8023	−42	1	+24	50	267	1		
		8022	−23	20	−20	27	24	6		
		8022	−17	26	−21	23	73	5		
		8024	+15	58	−17	19	48	7		
		8024	+18	61	−16	22	48	4		
		(*)	+21	64	−13	23	12	1		
		8015	+75	118	−36	79	436	3		
		8015	+78	121	−35	80	145	2		
		8015	+86	129	−34	86	485	1		
		(6)		(43)	(−5)		2,362	35		
21	11 7	8026	−64	325	+33	72	388	3	F	Do.
		8026	−55	334	+34	66	485	15		
		8023	−30	359	+24	42	218	1		
		8022	−10	19	−20	18	36	3		
		8022	−3	26	−22	18	36	2		
		8024	+29	58	−19	32	12	4		
		8024	+31	60	−19	33	24	2		
		8015	+88	117	−37	88	388	1		
		(5)		(29)	(−5)		1,587	31		
22	11 12	8026	−49	327	+35	61	388	3	F	Do.
		8027	−45	331	−17	47	12	4		
		8026	−39	337	+35	54	485	19		
		8023	−16	0	+28	37	12	2		
		8023	−15	1	+24	32	218	1		
		8023	−11	5	+30	38	6	1		
		8022	+9	25	−22	18	48	1		
		8024	+41	57	−20	43	6	3		
		(5)		(16)	(−5)		1,175	34		
23	10 55	8026	−38	325	+34	52	412	10	VG	Do.
		8026	−31	332	+34	50	145	15		
		8027	−31	332	−17	33	12	9		
		8027	−28	335	−17	31	24	1		
		8026	−27	336	+34	47	485	4		
		8023	−5	358	+28	33	6	2		
		8023	−4	359	+24	29	218	1		
		8022	+23	26	−22	28	48	10		
		(4)		(3)	(−5)		1,350	52		
24	11 50	8026	−25	324	+34	45	388	4	P	Do.
		8026	−20	329	+34	43	97	1		
		8027	−19	330	−17	22	48	2		
		8027	−17	332	−16	21	24	2		
		8027	−14	335	−17	19	73	4		
		8026	−13	336	+34	42	630	3		
		8023	+10	359	+24	30	218	1		
		8022	+37	26	−22	40	48	1		
		(4)		(349)	(−5)		1,526	18		
25	8 31	8028	−64	274	−21	65	12	1	VG	Mt. Wilson.
		8026	−14	324	+33	40	339	11		
		8026	−10	328	+34	40	97	4		
		8027	−7	331	−17	15	24	9		
		8027	−3	335	−17	13	97	10		
		8026	−3	335	+33	38	533	8		
		8023	+22	0	+24	36	206	1		
		8022	+41	19	−22	43	36	5		
		8022	+48	26	−22	50	48	1		
		(5)		(338)	(−5)		1,392	50		
26	10 42	8029	−76	247	+27	80	194	1	F	U. S. Naval.
		8028	−53	270	−21	55	12	6		
		8026	0	323	+34	39	242	1		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR APRIL 1946—Continued

Date	Eastern standard time	Mount Wilson group No.	Heliographic				Area of spot or group	Spot count	Plate quality	Observatory
			Difference in longitude	Longitude	Latitude	Distance from center of disk				
1946	h m		°	°	°	°				
Apr. 26	10 42	8026	+5	328	+34	40	73	5	F	U. S. Naval.
		8027	+7	330	−18	15	24	5		
		8026	+11	334	+34	41	509	3		
		8027	+12	335	−17	17	48	1		
		8023	+35	358	+24	45	194	1		
		8022	+62	25	−22	62	6	1		
		(6)		(323)	(−5)		1,302	24		
27	9 42	8033	−85	226	−15	85	97	2	VG	Mt. Wilson.
		8032	−79	232	−25	80	24	3		
		8029	−60	251	+26	67	194	1		
		8028	−40	271	−21	42	48	15		
		8028	−36	275	−21	38	97	7		
		8031	−30	281	−17	32	12	2		
		8026	+12	323	+33	40	218	7		
		8026	+18	329	+33	42	48	9		
		8027	+23	334	−17	26	145	25		
		8026	+25	336	+33	45	436	13		
		8023	+48	359	+24	55	194	1		
		(8)		(311)	(−5)		1,513	85		
28	10 46	8033	−79	218	−14	80	388	1	F	U. S. Naval.
		8033	−75	222	−14	75	388	1		
		8032	−65	232	−25	66	12	1		
		8029	−48	249	+27	57	194	1		
		8028	−24	273	−21	29	73	3		
		8031	−17	280	−18	22	48	1		
		8030	+11	308	+19	25	48	5		
		8034	+19	316	−23	26	24	2		
		8026	+27	324	+34	47	194	2		
		8027	+34	331	−18	37	218	2		
		8027	+38	335	−18	40	97	2		
		8026	+38	335	+34	52	388	3		
		8023	+61	358	+24	66	194	1		
		(10)		(297)	(−4)		2,266	25		
29	11 7	8033	−65	219	−14	65	436	1	F	Do.
		8033	−50	225	−15	60	388	4		
		8032	−52	232	−25	55	12	2		
		8036	−37	247	−25	41	97	5		
		8029	−34	250	+27	46	194	1		
		8028	−10	274	−21	19	73	4		
		8031	−1	283	−18	14	24	1		
		8034	+31	315	−24	36	6	2		
		8035	+35	319	+22	42	6	2		
		8026	+39	323	+34	53	97	2		
		8027	+47	331	−17	49	206	1		
		8026	+50	334	+34	61	97	2		
		8027	+52	336	−17	53	97	3		
		8023	+74	358	+24	78	194	1		
		(11)		(284)	(−4)		1,927	31		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR APRIL 1946—Continued

Date	Eastern standard time	Mount Wilson group No.	Heliographic				Area of spot or group	Spot count	Plate quality	Observatory
			Difference in longitude	Longitude	Latitude	Distance from center of disk				
1946	h m		°	°	°	°				
Apr. 30	8 57	8039	−65	207	−18	65	24	1	F	Mt. Wilson.
		8033	−53	219	−16	55	242	6		
		8038	−50	222	−28	53	97	7		
		8033	−44	228	−17	46	339	4		
		8036	−28	244	−26	34	73	9		
		8036	−24	248	−24	30	24	1		
		8029	−24	248	+26	38	170	1		
		8028	+3	275	−20	16	73	10		
		8031	+13	285	−17	18	6	1		
		8035	+43	315	+21	50	12	1		
		8026	+48	320	+25	55	36	4		
		8026	+60	332	+25	66	194	5		
		8027	+60	332	−17	61	242	4		
		8027	+64	336	−17	64	145	7		
		(10)		(272)	(−4)		1,677	61		

Mean daily area for 30 days=1,508
Mean 10 g+s for 30 days=97.5

* Not numbered.
VG=very good; G=good; F=fair; P=poor.
g=number of groups; s=number of spots.

PROVISIONAL RELATIVE SUNSPOT NUMBERS FOR APRIL 1946

[Based on observations at Zurich except as indicated by an asterisk. Data furnished through the courtesy of Prof. W. Brunner, Swiss Federal Observatory, Zurich, Switzerland.]

April 1946	Relative numbers	April 1946	Relative numbers	April 1946	Relative numbers
1	99	11	64	21	58
2	102	12	74	22	56
3	99	13	64	23	61
4	105	14	62	24	58
5	74	15	52	25	69
6	97	16	50	26	67
7	71	17	48	27	78
8	80	18	65	28	109
9	83	19	56	29	119
10	55	20	64	30	117

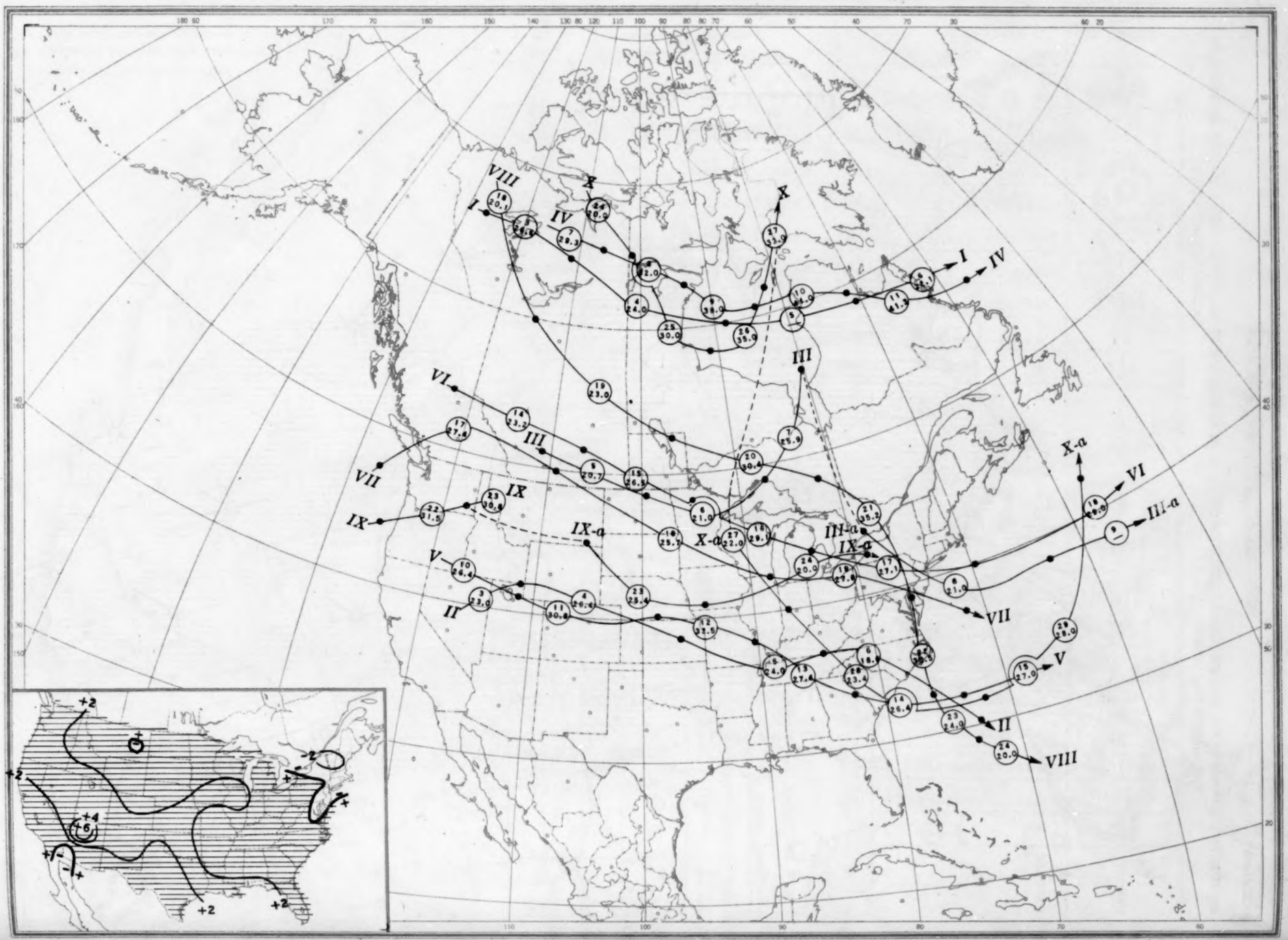
Mean, 30 days=75.2

Chart I. Departure (°F.) of the Mean Temperature from the Normal, and Wind Roses for Selected Stations, April 1946

Chart I. Departure (°F.) of the Mean Temperature from the Normal, and Wind Roses for Selected Stations, April 1946

HOURLY PERCENTAGES
100 50 50 100
Shaded portions show excess (+)
Unshaded portions show deficiency (—)
Lines show amount of excess or deficiency

Chart II. Tracks of Centers of Anticyclones, April 1946. (Inset) Departure of Monthly Mean Pressure from Normal

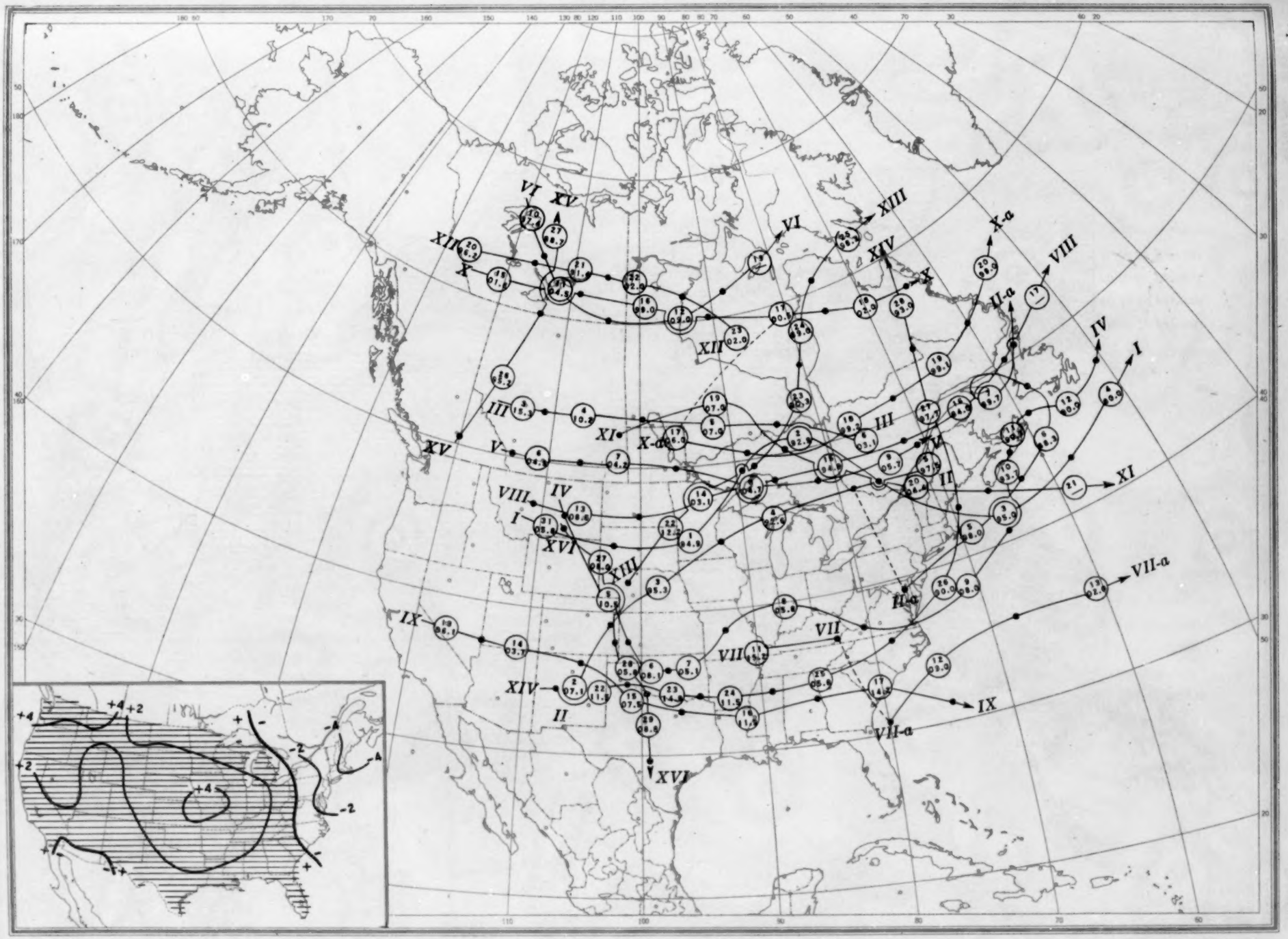


Circle indicates position of anticyclone at 7:30 a. m. (75th meridian time), with barometric reading. Dot indicates position of anticyclone at 7:30 p. m. (75th meridian time)

Chart III. Tracks of Centers of Cyclones, April 1946. (Inset) Change in Mean Pressure from Preceding Month

Circle indicates position of anticyclone at 7:30 a. m. (75th meridian time), with barometric reading. Dot indicates position of anticyclone at 7:30 p. m. (75th meridian time)

Chart III. Tracks of Centers of Cyclones, April 1946. (Inset) Change in Mean Pressure from Preceding Month



Circle indicates position of cyclone at 7:30 a. m. (75th meridian time), with barometric reading. Dot indicates position of cyclone at 7:30 p. m. (75th meridian time).

Chart IV. Percentage of Clear Sky Between Sunrise and Sunset, April 1946

Chart V. Total Precipitation, Inches, April 1946. (Inset) Departure of Precipitation from Normal

Chart V. Total Precipitation, Inches, April 1946. (Inset) Departure of Precipitation from Normal

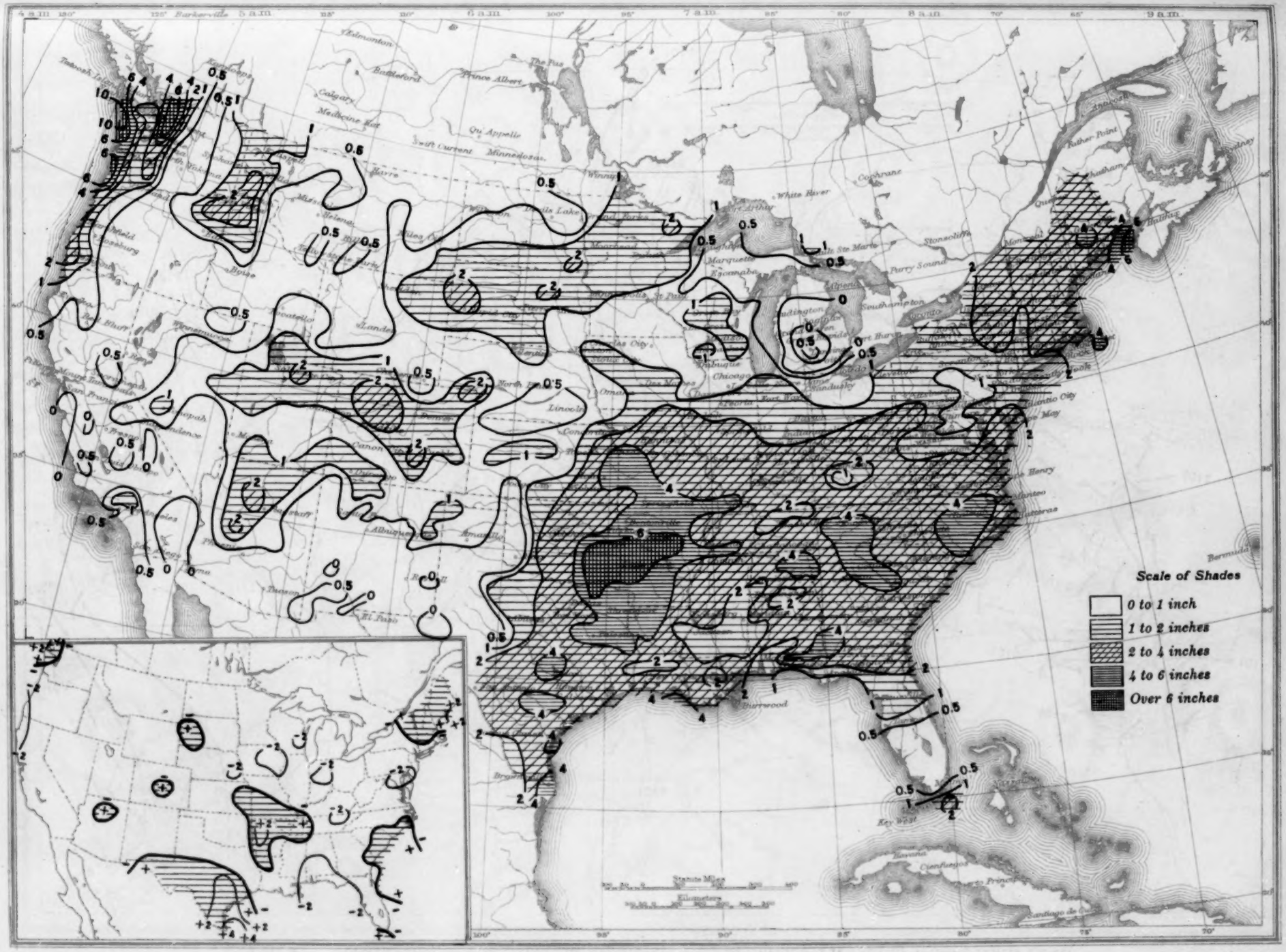


Chart VI. Isobars (mb), at Sea Level and Isotherms (°F.) at Surface; Prevailing Winds, April 1946

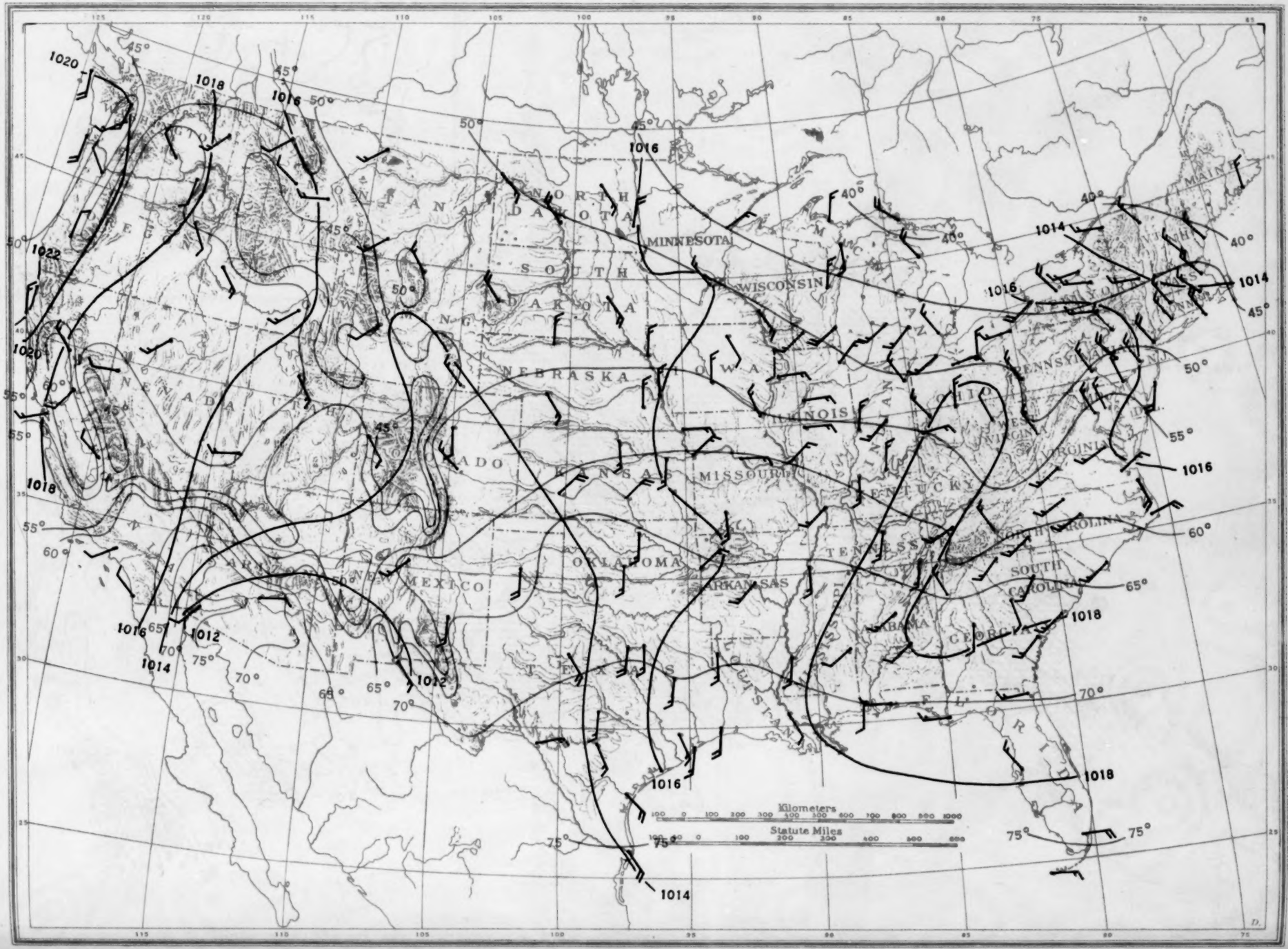


Chart VIII, April 1946. Contour Lines of Dynamic Height (Geopotential) in Units of 0.98 Dynamic Meter and Isotherms in Degrees Centigrade for the 850-millibar Pressure Surface, and Resultant Winds at 1,500 Meters (m.s.l.)

Chart VIII, April 1946. Contour Lines of Dynamic Height (Geopotential) in Units of 0.98 Dynamic Meter and Isotherms in Degrees Centigrade for the 850-millibar Pressure Surface, and Resultant Winds at 1,500 Meters (m.s.l.)

Contour lines and isotherms based on radiosonde observations at 0300 G.C.T. and winds based on pilot balloon observations at 1000 G.C.T.

Chart IX, April 1946. Contour Lines of Dynamic Height (Geopotential) in Units of 0.98 Dynamic Meter and Isotherms in Degrees Centigrade for the 700-millibar Pressure Surface, and Resultant Winds at 3,000 Meters (m.s.l.)

Contour lines and isotherms based on radiosonde observations at 0300 G.C.T. and winds based on pilot balloon observations at 1000 G.C.T.

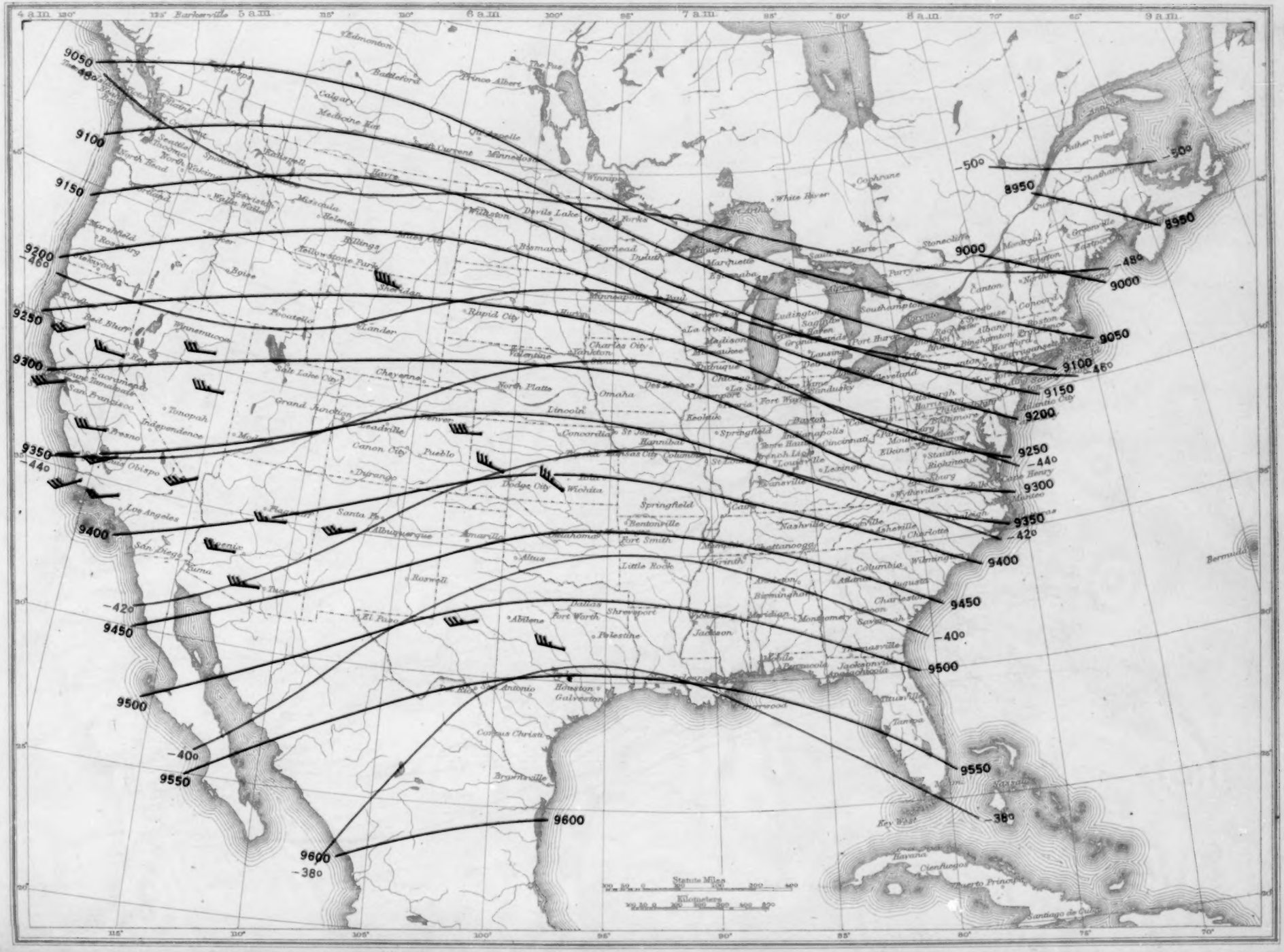
Chart X, April 1946. Contour Lines of Dynamic Height (Geopotential) in Units of 0.98 Dynamic Meter and Isotherms in Degrees Centigrade for the 500-millibar Pressure Surface, and Resultant Winds at 5,000 Meters (m.s.l.)

Contour lines and isotherms based on radiosonde observations at 0300 G.C.T. and winds based on pilot balloon observations at 1000 G.C.T.

Chart X, April 1946. Contour Lines of Dynamic Height (Geopotential) in Units of 0.98 Dynamic Meter and Isotherms in Degrees Centigrade for the 500-millibar Pressure Surface, and Resultant Winds at 5,000 Meters (m.s.l.)

Contour lines and isotherms based on radiosonde observations at 0300 G.C.T. and winds based on pilot balloon observations at 1000 G.C.T.

Chart XI, April 1946. Contour Lines of Dynamic Height (Geopotential) in Units of 0.98 Dynamic Meter and Isotherms in Degrees Centigrade for the 300-millibar Pressure Surface, and Resultant Winds at 10,000 Meters (m.s.l.)



Contour lines and isotherms based on radiosonde observations at 0300 G.C.T. and winds based on pilot balloon observations at 1000 G.C.T.